# Caernarvonshire County Council

# ANNUAL REPORT

OF THE

## COUNTY MEDICAL OFFICER OF HEALTH

FOR THE YEAR

## 1952

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Caernarvonshire County Council

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# CAERNARVONSHIRE COUNTY COUNCIL

*To the Chairman and Members of the Health Committee*

Ladies and Gentlemen,

This report for 1952 embodies the special survey prepared in February, 1952 at the request of the Welsh Board of Health. The survey was intended to analyse and record the development of the local health services and their integration with those provided by the Regional Hospital Board and the Executive Councils since the introduction of the National Health Service Act 1946.

Details concerning the various sections of the services are given in the following pages. They indicate steady progress in many directions. Most unfortunately, shortage of staff is having a retarding and generally adverse effect on development. Although nursing staff could have been obtained, the Council decided for financial reasons not to attempt to recruit this year the total nursing staff which had been prescribed in the " Proposals " formulated under the Act. At the end of the year, there were consequently eight Health Visitors and ten District Nurse/ Midwives fewer than the number prescribed.

It would be advisable to record the deficiencies in other staff at the end of 1952 resulting from difficulties in recruiting for many years.

| | |
|---|---|
| Assistant Medical Officer ... ... | 1 |
| Dental Surgeons ... ... ... ... | 2 |
| Mental Health Officers ... ... ... | 4 |

Premises for conducting Infant Welfare, Pre-Natal and other clinics are unsatisfactory in all but three areas. Only one new clinic has been built since 1930. Plans have been approved for the erection of a new clinic in Llanberis during 1954.

## Tuberculosis

While it is most encouraging to note the reduction in the Tuberculosis death rate as shown in Table 38, it is disturbing to find that there is no corresponding decrease in the number of new cases notified. The newer drugs used successfully in the treatment of the disease do not always render patients non-infectious. Consequently, the sources of infection are probably increasing in number. Too few beds in Sanatoria are provided. And if, as often happens, an infectious patient is discharged from a Sanatorium because of the scarcity of accommodation, he is a potential and very frequently an actual infectious risk to his family and others. It does not appear to be generally recognised that the expenditure of an additional small proportion of money on prevention and treatment of tuberculosis would result in a relatively much larger proportionate measure of elimination of the disease.

**Cancer**

It is most disturbing to record a continually increasing death rate from Cancer in recent years. The rates are recorded in Table 43. Modern facilities for diagnosis provide for more accurate diagnosis and more cases are now being recognised. It is also true that there is an increasing number of older people in the population. More people now live long enough to reach the age at which cancer is most prevalent. But after eliminating these two factors in the assessment of incidence of the disease, I fear that there is a true increase in the incidence.

Dr. Percy Stocks has concluded from a study of mortality rates that there is a much higher incidence of intestinal cancer in North Wales than there is in some other parts of Great Britain. During the period 1921-1939 the incidence of Cancer of the Stomach in the Rural Districts of this county was twice as high in males, and nearly $2\frac{1}{2}$ times as high in females as it was in the country generally. Death rates for cancer of the Breast and Uterus were, however, about the average for the same period. These figures have been corrected for age and sex of the population and are known as Comparative Mortality ratios.

With a view to obtaining special information, a very extensive and detailed survey is being made by Dr. Stocks for the Cheshire and North Wales Group Executive of the British Empire Cancer Campaign and the staff of the Health Department are making and recording detailed enquiries about each patient. Sanitary Inspectors are also taking samples of soil, in which vegetables may have been grown, in an attempt to obtain relevant information about its constituents. The survey and analysis is likely to be long and intricate and I am glad to have an opportunity of serving on the Executive Council and on the Scientific Committee of the Cheshire and North Wales Group Executive of the British Empire Cancer Campaign. During a period of 15 months, detailed information has been supplied concerning 353 patients from this County and 181 samples of soil have been collected.

It is a pleasure to acknowledge the expert diagnostic and treatment service now provided by Dr. Fulton and his staff from the Liverpool Radium Institute. A clinic is held weekly in Bangor and cases receive prompt treatment in the Liverpool Hospital. I was associated with the establishment of this service and I would like to record my appreciation of the practical interest taken by Dr. Lloyd Hughes, the Senior Administrative Medical Officer of the Liverpool Regional Hospital Board, in the service. I do not think it is generally realised how beneficial this service is to the inhabitants of this county.

I hope there will be an extension of propaganda by the Council, with the co-operation of General Practitioners, towards making people realise the absolute necessity for recognising and treating cancer in the earliest possible stage of development. Further details relating to Cancer will be found in Tables 41, 42 and 43.

**Saving of Lives**

Table 9 demonstrates the decreasing number of deaths in the early age groups. It is impossible to make a strictly accurate comparison because the number of persons in the various age groups is not known for 1930. But a comparison of the figures does show that the greatest saving of lives occurs in age groups below 65. In my report for 1948/49 I recorded for the first time the estimated saving of infant lives.

If the Infant Mortality rate had remained throughout the period 1901 to 1952 as high as it was in 1901, at least 7,900 more babies would have died during the period. We may justifiably claim that the increasingly extensive and efficient care given to mothers and children has materially contributed towards saving the lives of nearly 8,000 children in the last fifty years.

**Health Education**

Educating the mass of the people to strive for positive health is a long, continuous process. As yet, we are only barely aware of the intricacies of the process and its solution. Cure is so much more sudden and spectacular than prevention.

**Food and Disease**

I am convinced that the continually increasing interference with the natural growth and preparation of our staple foods is bound to have a slow deleterious effect on the physical and mental health of the adult population. Our children are undoubtedly healthier than they were fifty years ago, but there is an increasing amount of ill-health among the middle aged sections of the population. Is the ever increasing chemical modification of our staple foods a coincidence or a cause ? Unsuitable diet does cause definite diseases which are recognisable. But the very early stages of the diseases are not easily recognisable. The rather vague feelings of ill-health may persist for many years and may perhaps never present as definitely recognisable disease. Is it not, therefore, vitally necessary to consider nationally all our food supplies and to revert to a more natural production and preparation of the staple foods.

I gladly record the assistance I have received from all members of the staff. Members and officers of various voluntary organisations have also continued to render valuable help. The unfailing support and interest of the Chairmen and members of the various Committees have been demonstrated in many directions. Members of the public show their appreciation of the Council's Health Services and from this may be derived an inspiration and stimulus to renew the efforts to promote and maintain " better health."

D. E. Parry-Pritchard.

*July*, 1953.

## COUNTY HEALTH COMMITTEE

*Chairman* : Councillor Owen Ellis

*Vice-Chairman* : Councillor Griffith I. Evans, J.P., M.D., F.R.C.S.

Ald. W. Cradoc Davies
,, Mrs. A. Fisher, M.B.E., J.P.
,, Dr. O. Wynne Griffiths, O.B.E., J.P.
,, E. R. Jones
,, J. T. Jones
,, R. J. Gresley Jones
,, Capt. R. O. Jones
,, Mrs. E. M. Marks, J.P.
,, Hugh Parry, C.B.E.
,, J. W. Pritchard
,, J. Howell Roberts
,, W. W. Spier
,, John Thomas, J.P.
Coun. Mrs. E. Chamberlain, M.B.E., J.P.
,, A. H. Davies
,, G. Buan Davies
,, Rev. H. Oliver Evans
,, J. O. Hughes
,, A. Hughes-Jones
Coun. D. T. Jones
,, W. W. Jones
,, Dr. O. Vaughan Jones
,, Lewis Jones
,, Capt. S. T. A. Livingstone-Learmonth
,, A. Macfarlane
,, Mrs. C. A. Middleton
,, J. R. Morgan
,, Thomas Morris
,, Robert Owen
,, Mrs. E. M. Oxley
,, A. Ivor Parry
,, E. O. Parry
,, H. Hughes Parry
,, W. J. Roberts
,, J. G. Roberts
,, Robert Roberts
,, E. D. Rowlands
,, J. T. Roberts
,, R. Shelmerdine
,, D. Emrys Williams

### Added Members

| *Representing* | |
|---|---|
| *Medical Profession* ... ... | Dr. R. Salter Ellis |
| | Dr. J. Noel Roberts |
| | Dr. J. Mostyn Williams |
| *Chemists* ... ... ... ... | H. Hughes Parry, Esq. |
| *Dental Surgeons* ... ... | Col. P. Lloyd Williams |
| *Executive Council* ... ... | Rev. T. Idris Roberts |
| *Hospital Management Committee* | Mrs. E. Darbishire, J.P. |
| *Others* ... ... ... ... | Mrs. John Thomas |
| | J. Evan Roberts, Esq. |
| *Clerk of the County Council* ... | Gwilym T. Jones, Esq., M.A., *Solicitor* |
| *County Treasurer* ... ... | Elfyn E. Wigley, Esq., B.A.,A.S.A.A. |

## STAFF OF THE PUBLIC HEALTH SERVICE

| | |
|---|---|
| *County Medical Officer of Health and School Medical Officer* | D. E. Parry-Pritchard, M.D., D.P.H., M.B., Ch.B. |
| *Deputy County Medical Officer of Health and School Medical Officer* | G. Wyn Roberts, M.B., B.Ch., B.A.O., D.P.H. |
| *Assistant Medical Officers* : | M. Slater, M.B., Ch.B., C.P.H., D.C.H. |
| | R. O. Morris, M.D., Ch.B., D.P.H. |
| | T. Evan Hughes, M.R.C.S., L.R.C.P. |
| | W. N. Gaye, M.R.C.S., L.R.C.P., D.P.H. *Commenced March*, 1952. *Resigned September*, 1952. |
| *Part-Time Obstetrician and Gynaecologist* | O. Vaughan Jones, M.D., F.R.C.S., F.R.C.O.G., M.B., Ch.B. |
| *Part-Time Paediatrician* ... | Gwyn Griffith, M.D., F.R.C.P., D.C.H., D.P.H. |
| *County Superintendent* ... ... | Miss M. Richards, S.R.N., S.C.M., H.V., M.T.D., Q.N.S. |
| *Superintendent Health Visitor* ... | Miss W. M. Mills, S.R.N., S.C.M., H.V. |
| *Welfare and Rehabilitation Officer* | Mrs. P. Imeson (*Resigned May*, 1952) |
| | Miss H. J. Croxford (*Commenced May*, 1952) |

| | |
|---|---|
| Whole-time Health Visitors and School Nurses ... | 18 |
| Infectious Diseases Nurse ... ... ... ... | 1 |
| Midwives employed directly by the Council : | |
| Full-time ... ... ... ... ... ... | 4 |
| Part-time ... ... ... ... ... ... | 44 |
| District Nurses employed directly by the Council : | |
| Full-time ... ... ... ... ... ... | 4 |
| Part-time ... ... ... ... ... ... | 44 |
| *County Health Officer* ... | G. Richards, A.R.S.I. |
| *Chief Clerk* ... ... ... | C. Parry |

### Food and Drugs Act

| | |
|---|---|
| *Public Analyst* ... ... ... | Harold Lowe, M.Sc., F.I.C. |
| *County Inspectors* ... ... | E. T. Edwards (Chief) |
| | Robert Roberts (Deputy) |
| | Evan J. Griffiths |

# CHAPTER 1

## GENERAL NOTES ON THE LOCAL HEALTH SERVICES

### Administration

The Health Services provided by the County Council under the National Health Service Act, 1946, are governed by the County Health Committee and four Sub-Committees, viz., Maternity and Child Welfare Sub-Committee, Mental Health Sub-Committee, Care Sub-Committee and Ambulance Sub-Committee.

The County Medical Officer of Health is responsible for the central control, co-ordination and supervision of the services. Periodical staff meetings are held to secure the efficient co-ordination and development of the services provided throughout the county. On page 10 the diagram displays the administrative pattern and inter-relation of the services.

### Co-ordination and Co-operation with other parts of the National Health Service

All the preventive health services and a large part of the hospital services in Caernarvonshire were directed and co-ordinated by me before the introduction of the National Health Service Act. Some of the services now administered by the Hospital Management Committee were originally introduced by me in conjunction with the Specialist Officers concerned. This personal contact and understanding between the officers responsible for the administration of the services has continued. It has helped to produce mutual arrangements between the two Authorities, thus securing uninterrupted service to patients.

Before the introduction of the Act, the Pre and Post Natal Clinics were staffed by the County Council's Consultant Obstetrician and his Assistants from the County Hospital. This arrangement continues to operate satisfactorily and there is close collaboration between the responsible Authorities.

Co-ordination of the Orthopaedic, Ophthalmic, Orthoptic, Ear, Nose and Throat, Skin, and Child Guidance Clinics remains practically unchanged. I am glad to record that the Hospital Management Committee accepted the suggestion that the County Medical Officer should continue to make the detailed administrative arrangements for holding the Clinics in various parts of the county.

Co-operation between the Department and General Practitioners has been excellent throughout and is emphasised by the manner in which practitioners seek the services provided by the Council for their patients. Mutual arrangements have been made between most of the practitioners in the county and the Health Department for the direct referral of some children to specialists by the Health Department and for providing treatment at the Council's clinics.

Copies of the Specialists' reports are sent to the General Practitioners. Health Visitors and Nurse/Midwives work harmoniously with General Practitioners and assist them in the care of patients. Many injections and other treatments are given by nurses on behalf of General Practitioners. Shortage of staff precludes an even greater measure of assistance.

General Practitioners are supplied with copies of the County Health

Report, which contains details of the services provided. Information on special matters are sent to them periodically. A public guide to the service has not been produced because the dissemination of information by Health Visitors and Nursing Staff is considered more effective.

My Membership of the Local Executive Council and of the Local Medical Committee is of the utmost value in fostering mutual appreciation and often the solution of the problems of the Authorities concerned. General Practitioners are most useful co-opted members of the County Health Committee.

A Paediatric Club meets regularly every month in Bangor. It provides opportunities for the Authority's Medical and Nursing Staff to obtain modern views on Paediatric problems and to discuss them. The Club serves to focus the attention of Consultants, Public Health Officers and General Practitioner members on the Child in Health and Disease. The Board's Paediatric Service works in the closest collaboration with the Maternity and Child Welfare Services of the Council.

Very close contact is maintained with the Child Guidance Clinic now provided by the Regional Hospital Board but originally established by the County Council.

**Joint Use of Staff**

Apart from participation by General Medical Practitioners in the Council's Scheme for Diphtheria Immunisation and Vaccination against Smallpox, all medical duties in schools and infant welfare clinics are performed by the Council's own Medical Officers.

Pre and Post-Natal Clinics are attended by the Consultant Obstetricians and staff from the County Hospital, Bangor. Orthopaedic and Ophthalmic Clinics which the County Council administer as agents of the Regional Hospital Board are attended by the Board's Specialist Officers.

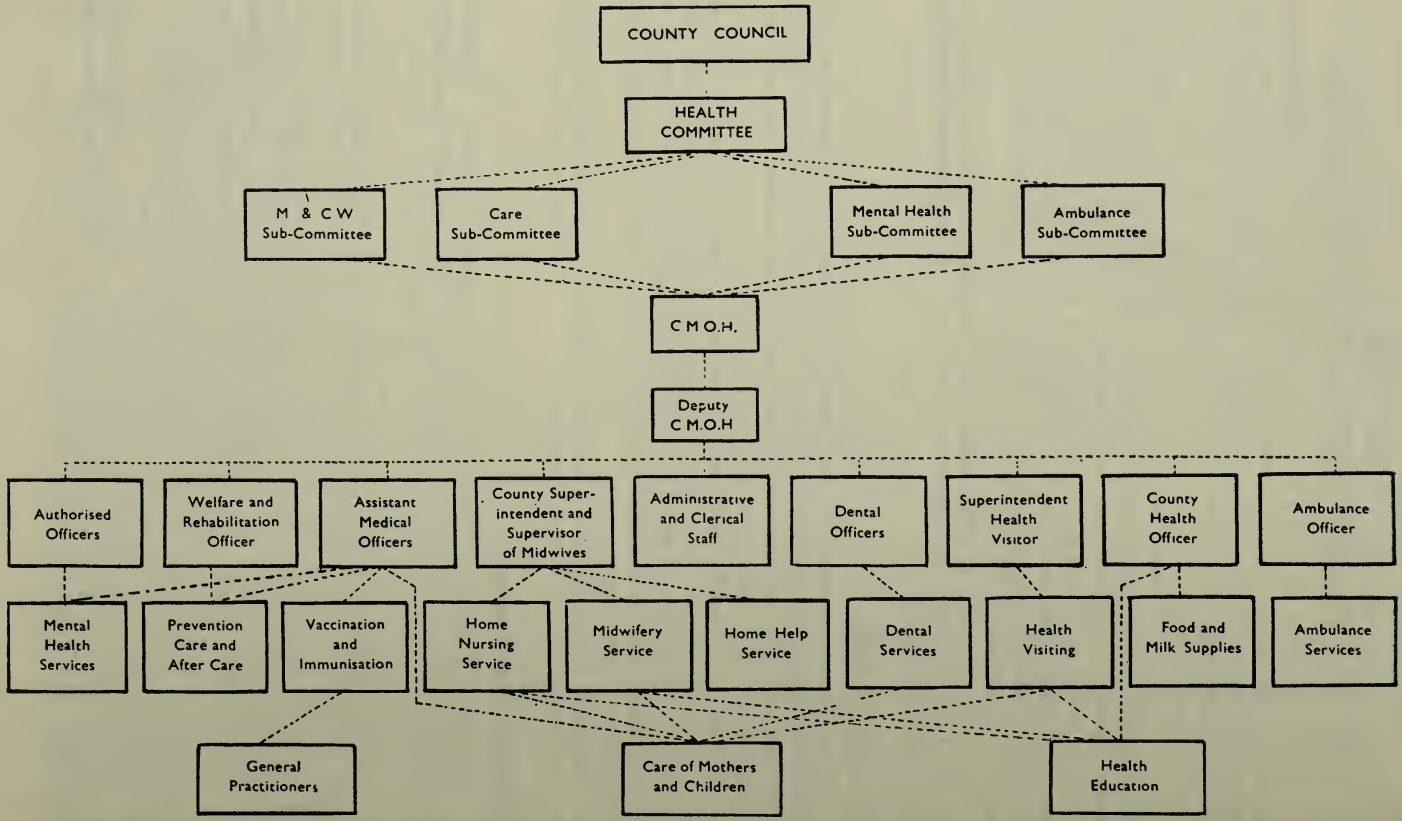
Duties in connection with the prevention and control of tuberculosis are performed by the Chest Physician.

**Voluntary Organisations**

Women's Institutes, Rotary Clubs, Mothers' Unions, Women's Voluntary Services and other organisations are contacted periodically in connection with Health Education. Talks on health are given to these organisations by members of the staff.

The Women's Voluntary Service participates in the Council's Ambulance Service and their cars are used as " Sitting Case Cars " whenever the occasion demands. Mutual arrangements have been made between the County Council, the British Red Cross Society and the St. John's Ambulance Association for supplying equipment on loan to patients nursed at home and for uniformity of charges made to patients. Members of the British Red Cross Society assist at some of the Council's clinics and act as escorts to young children whose parents are unable to accompany them for treatment at hospitals and clinics.

Most of the Infant Welfare Clinics in the county are attended by voluntary workers who have formed their own Clinic Committees and appointed their own Secretary and Treasurer.


COUNTY COUNCIL
HEALTH COMMITTEE
M & C W Sub-Committee
Care Sub-Committee
Mental Health Sub-Committee
Ambulance Sub-Committee
C M O.H.
Deputy C M.O.H
Authorised Officers
Welfare and Rehabilitation Officer
Assistant Medical Officers
County Superintendent and Supervisor of Midwives
Administrative and Clerical Staff
Dental Officers
Superintendent Health Visitor
County Health Officer
Ambulance Officer
Mental Health Services
Prevention Care and After Care
Vaccination and Immunisation
Home Nursing Service
Midwifery Service
Home Help Service
Dental Services
Health Visiting
Food and Milk Supplies
Ambulance Services
General Practitioners
Care of Mothers and Children
Health Education

# CHAPTER 2

## STATISTICAL INFORMATION

### Summary of Vital Statistics

| | |
|---|---|
| Area in Acres ... ... ... ... ... ... ... | 364,108 |
| Population : Census, 1931 ... ... ... ... ... | 120,820 |
| Registrar General's Estimate ... ... ... | 122,500 |
| Rateable Value ... ... ... ... ... ... ... | £662,134 |
| Product of 1d. rate ... ... ... ... ... ... | £2,589 |

### Extracts from Vital Statistics

| Live Births | M. | F. | Total | | |
|---|---|---|---|---|---|
| Legitimate ... | 851 | 768 | 1619 | Birth Rate per 1,000 Population | 13.89 |
| Illegitimate ... | 36 | 47 | 83 | | |
| Stillbirths | | | | Rates per 1,000 Total (Live and Still) Births | |
| Legitimate ... | 15 | 27 | 42 | | 25.20 |
| Illegitimate ... | 1 | 1 | 2 | | |
| Deaths from all Causes ... | 939 | 847 | 1786 | Death Rate ... ... | 14.58 |
| Maternal Deaths ... | — | 1 | 1 | Rate per 1,000 Total (Live and Still) Births | 0.572 |

| | |
|---|---|
| Death Rates of Infants Under 1 Year of Age : | |
| All infants per 1,000 Live Births ... ... ... ... | 28.20 |
| Legitimate Infants per 1,000 Legitimate Live Births ... | 25.94 |
| Illegitimate Infants per 1,000 Illegitimate Live Births ... | 72.29 |
| Deaths from Enteritis (under 2 years of age) ... ... | 2 |
| Rate per cent of Live Births ... ... ... ... ... | 0.117 |
| Deaths from Measles (all ages) ... ... ... ... | — |
| Rate per 1,000 of the population ... ... ... ... | 0.00 |
| Deaths from Whooping Cough (all ages) ... ... ... | — |
| Rate per 1,000 of the population ... ... ... ... | 0.00 |
| Zymotic Mortality ... ... ... ... ... ... | 5 |
| Rate per 1,000 of the population ... ... ... ... | 0.041 |
| Deaths from Cancer ... ... ... ... ... ... | 349 |
| Rate per 1,000 of the population ... ... ... ... | 2.849 |
| Deaths from Respiratory Diseases (excluding Tuberculosis) ... ... ... ... ... ... ... | 136 |
| Rate per 1,000 of the population ... ... ... ... | 1.110 |
| Deaths from Tuberculosis ... ... ... ... ... | 49 |
| Rate per 1,000 of the population ... ... ... ... | 0.40 |

TABLE I

## AREA AND POPULATION OF THE COUNTY

### Rural Districts

| District | Estimated Resident Population | Acreage as constituted at 30th June, 1935 |
|---|---|---|
| Nant Conway ... ... ... | 6,107 | 88,222 |
| Gwyrfai ... ... ... ... | 23,550 | 96,475 |
| Lleyn ... ... ... ... | 17,210 | 114,831 |
| Ogwen ... ... ... ... | 4,893 | 32,526 |
| Totals ... ... | 51,760 | 332,054 |

### Urban Districts

| | | |
|---|---|---|
| Bangor ... ... ... ... | 13,820 | 1,576 |
| Bethesda ... ... ... ... | 4,406 | 893 |
| Betwsycoed ... ... ... | 744 | 4,472 |
| Caernarvon... ... ... ... | 9,305 | 2,213 |
| Conway ... ... ... ... | 10,120 | 3,808 |
| Criccieth ... ... ... ... | 1,499 | 1,132 |
| Llandudno ... ... ... ... | 16,030 | 4,920 |
| Llanfairfechan ... ... ... | 3,055 | 4,472 |
| Penmaenmawr ... ... ... | 4,086 | 3,814 |
| Pwllheli ... ... ... ... | 3,770 | 1,211 |
| Portmadoc ... ... ... | 3,905 | 3,543 |
| Totals ... ... | 70,740 | 32,054 |

### Rural and Urban Districts

| | | |
|---|---|---|
| Rural ... ... ... ... | 51,760 | 332,054 |
| Urban ... ... ... ... | 70,740 | 32,054 |
| Totals ... ... | 122,500 | 364,108 |

TABLE 2

## OTHER VITAL STATISTICS

(Rates per 1,000 of the Population)

| District | Births | | Deaths (All Causes) | Infant Mortality* | Cancer | Respiratory Diseases | Tuberculosis |
|---|---|---|---|---|---|---|---|
| | Live | Still | | | | | |
| RURAL DISTRICTS | | | | | | | |
| Nant-Conway... ... | 14.082 | 0.491 | 13.099 | 11.628 | 2.129 | 0.819 | 0.819 |
| Gwyrfai ... ... | 14.097 | 0.382 | 15.583 | 42.169 | 2.675 | 1.146 | 0.722 |
| Lleyn ... ... ... | 14.352 | 0.349 | 15.979 | 28.340 | 3.021 | 1.162 | 0.116 |
| Ogwen ... ... | 13.489 | 0.817 | 13.284 | 30.303 | 2.044 | 2.044 | 0.613 |
| URBAN DISTRICTS | | | | | | | |
| Bangor ... ... | 14.327 | 0.362 | 12.590 | 35.354 | 3.256 | 0.868 | 0.434 |
| Bethesda ... ... | 17.476 | 0.908 | 16.795 | 12.987 | 2.497 | 1.135 | 1.135 |
| Betwsycoed ... ... | 17.473 | 2.688 | 13.441 | 0.000 | 2.688 | 1.344 | 0.000 |
| Caernarvon ... ... | 16.120 | 0.322 | 13.004 | 13.333 | 2.579 | 1.505 | 0.101 |
| Conway ... ... | 12.055 | 0.099 | 13.933 | 16.393 | 2.668 | 1.186 | 0.395 |
| Criccieth ... ... | 8.672 | 0.000 | 14.676 | 0.000 | 2.001 | 1.334 | 0.000 |
| Llandudno ... ... | 12.227 | 0.062 | 15.845 | 40.816 | 3.369 | 0.686 | 0.125 |
| Llanfairfechan ... | 10.147 | 0.982 | 14.730 | 32.258 | 2.291 | 1.309 | 0.327 |
| Penmaenmawr ... | 14.929 | 0.245 | 11.747 | 16.393 | 1.713 | 1.713 | 0.000 |
| Pwllheli ... ... | 15.199 | 0.265 | 14.058 | 17.544 | 4.509 | 0.796 | 0.265 |
| Portmadoc ... ... | 13.572 | 0.256 | 14.597 | 18.868 | 3.585 | 0.768 | 0.512 |
| RURAL DISTRICTS ... | 14.123 | 0.425 | 15.205 | 32.832 | 2.666 | 1.198 | 0.522 |
| URBAN DISTRICTS ... | 13.726 | 0.311 | 14.122 | 24.717 | 2.983 | 1.046 | 0.311 |
| TOTAL COUNTY ... | 13.894 | 0.359 | 14.579 | 28.202 | 2.849 | 1.110 | 0.400 |
| ENGLAND & WALES | 15.3 | 0.35 | 11.3 | 27.6 | — | — | 0.24 |

*Death Rate per 1,000 Live Births

## BIRTHS AND BIRTH RATES

The total number of live births registered during 1952 was 1702 (887 males and 815 females), a rate of 13.89 per 1,000 of the population. Stillbirths totalled 44 (16 males and 28 females), a rate of 0.359 per 1,000 of the population.

In the four Rural Districts 731 live births were registered—a rate of 14.123 per 1,000 of the population. The number of stillbirths was 22 (0.425 per 1,000 of the population).

In the eleven Urban Districts 971 live births (13.726 per 1,000 of the population) were registered and there were 22 stillbirths (0.311 per 1,000 of the population).

The Birth Rates per 1,000 of the population in the various districts in the county during the last ten years are given below :—

TABLE 3

| Districts | 1943 | 1944 | 1945 | 1946 | 1947 | 1948 | 1949 | 1950 | 1951 | 1952 |
|---|---|---|---|---|---|---|---|---|---|---|
| RURAL DISTRICTS | | | | | | | | | | |
| Nant Conway ... ... | 17.9 | 13.1 | 13.0 | 15.4 | 14.89 | 13.69 | 15.42 | 14.53 | 13.46 | 14.08 |
| Gwyrfai ... ... ... | 15.7 | 17.1 | 15.8 | 18.0 | 19.64 | 18.00 | 15.97 | 14.24 | 13.92 | 14.09 |
| Lleyn ... ... ... | 17.5 | 14.8 | 15.2 | 16.7 | 15.75 | 15.40 | 14.42 | 14.20 | 14.07 | 14.35 |
| Ogwen ... ... ... | 16.4 | 18.8 | 14.0 | 16.1 | 17.15 | 17.33 | 16.32 | 17.44 | 17.73 | 13.49 |
| URBAN DISTRICTS | | | | | | | | | | |
| Bangor ... ... ... | 14.4 | 14.9 | 15.3 | 18.4 | 19.17 | 18.41 | 16.16 | 14.59 | 14.23 | 14.33 |
| Bethesda ... ... ... | 15.1 | 19.1 | 13.4 | 17.5 | 20.50 | 16.80 | 16.38 | 16.25 | 16.56 | 17.48 |
| Betwsycoed ... ... | 13.9 | 14.5 | 10.1 | 12.8 | 17.85 | 15.87 | 19.92 | 16.24 | 20.83 | 17.47 |
| Caernarvon ... ... | 18.9 | 17.7 | 13.6 | 20.1 | 20.70 | 17.12 | 16.45 | 16.41 | 16.32 | 16.12 |
| Conway ... ... ... | 9.6 | 14.5 | 14.5 | 15.3 | 15.40 | 15.00 | 15.83 | 12.91 | 13.93 | 12.05 |
| Criccieth ... ... ... | 14.6 | 17.3 | 9.6 | 16.4 | 13.92 | 12.14 | 12.42 | 8.63 | 12.21 | 8.67 |
| Llandudno ... ... | 10.1 | 11.6 | 10.8 | 13.2 | 15.86 | 13.77 | 11.53 | 12.74 | 12.25 | 12.23 |
| Llanfairfechan ... ... | 13.4 | 14.1 | 8.9 | 17.2 | 19.94 | 12.85 | 14.32 | 12.64 | 13.78 | 10.15 |
| Penmaenmawr ... ... | 10.6 | 12.9 | 11.7 | 16.8 | 15.97 | 12.47 | 12.41 | 14.88 | 12.83 | 14.93 |
| Pwllheli ... ... ... | 17.5 | 22.0 | 15.2 | 17.1 | 21.64 | 19.19 | 17.69 | 15.49 | 13.83 | 15.20 |
| Portmadoc ... ... | 17.6 | 14.1 | 13.8 | 16.1 | 19.16 | 16.51 | 14.35 | 11.84 | 11.62 | 13.57 |
| RURAL DISTRICTS ... | 16.6 | 16.0 | 15.1 | 17.1 | 17.59 | 16.55 | 15.42 | 14.55 | 14.28 | 14.12 |
| URBAN DISTRICTS ... | 13.2 | 14.8 | 13.0 | 16.4 | 18.01 | 15.75 | 14.74 | 13.98 | 13.91 | 13.73 |
| TOTAL COUNTY ... | 14.6 | 15.3 | 13.9 | 16.7 | 17.83 | 16.09 | 15.03 | 14.22 | 14.06 | 13.89 |
| ENGLAND AND WALES ... | 16.5 | 17.6 | 16.1 | 19.1 | 20.50 | 17.90 | 16.7 | 15.8 | 15.50 | 15.30 |

## ILLEGITIMATE BIRTHS

Eighty-three illegitimate live births were registered in the county during 1952, representing a rate of 4.876 per cent of the total live births.

This table gives details of the illegitimate births in the various Sanitary Districts in the county :—

TABLE 4

| District | Total Live Births | Number of Illegitimate Live Births | Percentage |
|---|---|---|---|
| RURAL DISTRICTS | | | |
| Nant Conway ... ... | 86 | 5 | 5.813 |
| Gwyrfai ... ... ... | 332 | 17 | 5.120 |
| Lleyn ... ... ... ... | 247 | 13 | 5.263 |
| Ogwen ... ... ... | 66 | 7 | 10.606 |
| URBAN DISTRICTS | | | |
| Bangor ... ... ... | 198 | 6 | 3.030 |
| Bethesda ... ... ... | 77 | 3 | 3.896 |
| Betwsycoed ... ... ... | 13 | — | — |
| Caernarvon ... ... ... | 150 | 6 | 4.000 |
| Conway ... ... ... | 122 | 6 | 4.918 |
| Criccieth ... ... ... | 13 | 1 | 7.692 |
| Llandudno ... ... ... | 196 | 11 | 5.612 |
| Llanfairfechan ... ... | 31 | — | — |
| Penmaenmawr ... ... | 61 | 5 | 8.196 |
| Pwllheli ... ... ... | 57 | 2 | 3.508 |
| Portmadoc ... ... ... | 53 | 1 | 1.886 |
| RURAL DISTRICTS ... ... | 731 | 42 | 5,745 |
| URBAN DISTRICTS ... ... | 971 | 41 | 4.222 |
| TOTAL COUNTY ... ... | 1702 | 83 | 4.876 |

## INFANT MORTALITY

Forty-eight infant deaths (42 legitimate and 6 illegitimate infants) were recorded during 1952. The graph on page 18 indicates the steady decrease in the infant mortality rate in the county since 1900, and the rate of 28.20 per 1,000 live births in 1952 is the lowest ever recorded in Caernarvonshire.

## NEO-NATAL DEATHS

TABLE 5

| Year | No. of Neo-Natal Deaths | Rate per 1,000 Live Births |
|---|---|---|
| 1933 | 68 | 41.2 |
| 1934 | 71 | 44.5 |
| 1935 | 78 | 47.2 |
| 1936 | 67 | 42.0 |
| 1937 | 70 | 43.3 |
| 1938 | 68 | 41.5 |
| 1939 | 66 | 39.8 |
| 1940 | 56 | 35.2 |
| 1941 | 78 | 44.6 |
| 1942 | 68 | 35.0 |
| 1943 | 69 | 35.7 |
| 1944 | 71 | 36.4 |
| 1945 | 63 | 37.1 |
| 1946 | 55 | 26.9 |
| 1947 | 64 | 29.3 |
| 1948 | 39 | 19.9 |
| 1949 | 37 | 19.9 |
| 1950 | 38 | 21.58 |
| 1951 | 36 | 20.76 |
| 1952 | 30 | 17.62 |

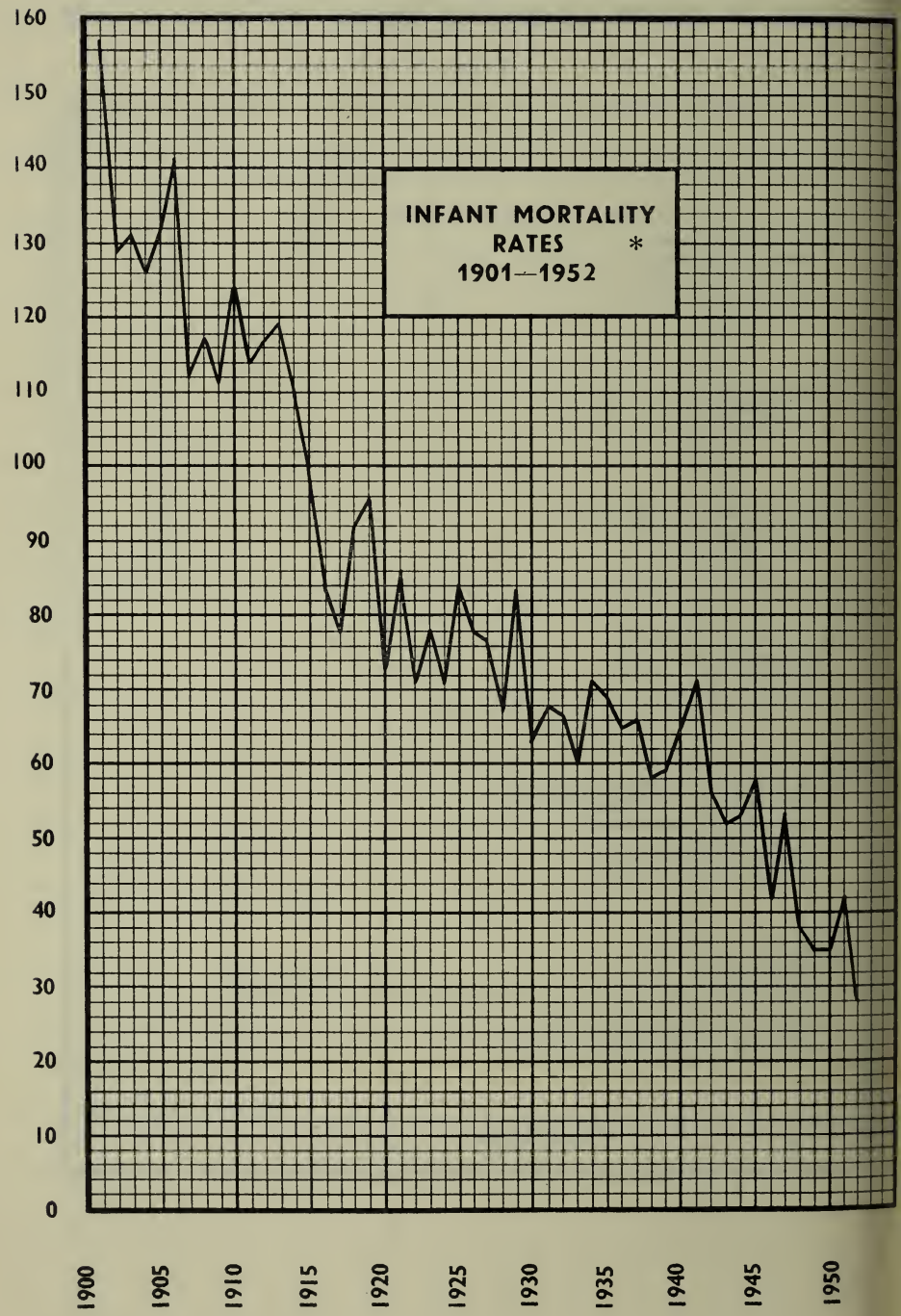
TABLE 6

| Cause of Neo-Natal Death | No. of Deaths |
|---|---|
| Pneumonic Congestion ... ... ... ... ... ... | 1 |
| Atelectasis ... ... ... ... ... ... ... ... | 1 |
| Birth Injury—Difficult Labour, etc. ... ... ... ... | 2 |
| Intracranial Hæmorrhage ... ... ... ... ... ... | 3 |
| White Asphyxia ... ... ... ... ... ... ... | 3 |
| Prematurity ... ... ... ... ... ... ... ... | 8 |
| Prematurity plus bronchopneumonia ... ... ... ... | 1 |
| Prematurity plus atelectasis ... ... ... ... ... | 3 |
| Prematurity plus intracranial hæmorrhage ... ... ... | 1 |
| Prematurity plus Rh. factor ... ... ... ... ... | 1 |
| Accident—Inhalation of Vomit ... ... ... ... ... | 3 |
| Other Accidents ... ... ... ... ... ... ... | 1 |
| Disease of the Liver ... ... ... ... ... ... | 1 |
| Cerebral Thrombosis... ... ... ... ... ... ... | 1 |
| Total ... ... ... ... | 30 |

## CAUSES OF DEATHS OF INFANTS UNDER ONE YEAR OF AGE

TABLE 7

| Cause of Death | No. of Deaths |
|---|---|
| CONGENITAL MALFORMATIONS (other than in Premature Infants) | — |
| DISEASES OF THE RESPIRATORY TRACT (in full-term infants) : | |
| Acute Bronchitis | 1 |
| Bronchopneumonia | 6 |
| Pneumonic congestion | 3 |
| Atelectasis | 3 |
| | 13 |
| DISEASES OF THE GASTRO INTESTINAL TRACT (in full-term infants) : | |
| Diarrhœa, enteritis, etc. | 4 |
| | 4 |
| ACCIDENTS (in full-term infants) : | |
| Inhalation of Vomit | 4 |
| Other accidents | 1 |
| | 5 |
| MISCELLANEOUS CAUSES : | |
| Diseases of the Liver | 1 |
| Convulsions | 1 |
| Cerebral Thrombosis | 1 |
| | 3 |
| BIRTH INJURIES (in full-term infants) : | |
| Birth Injury—" Difficult Labour " | 2 |
| Intracranial hæmorrhage | 3 |
| White Asphyxia | 3 |
| Suprarenal hæmorrhage | 1 |
| | 9 |
| PREMATURE INFANTS : | |
| Prematurity | 8 |
| Prematurity plus bronchitis, bronchopneumonia or pneumonia | 1 |
| Prematurity plus atelectasis | 3 |
| Prematurity plus intracranial hæmorrhage | 1 |
| Prematurity plus Rhesus Factor | 1 |
| | 14 |
| Total Deaths | 48 |




* The number of Infant Deaths under one year of age per 1,000 live births.

## DEATHS AND DEATH RATES

The number of deaths registered in the county was 1,786, a rate of 14.58 per 1,000 of the population.

The chief causes of death were :—

| | |
|---|---|
| Heart Diseases ... ... ... ... | 660 |
| Cancer ... ... ... ... ... | 349 |
| Tuberculosis ... ... ... ... | 49 |
| Other Respiratory Diseases ... | 136 |

In the Urban Districts there were 999 deaths (14.122 per 1,000 of the population).

Deaths in Rural Districts amounted to 787 (15.205 per 1,000 of the population).

## AGE AND SEX DISTRIBUTION OF DEATHS

TABLE 8

| Sex | All Ages | Under 1 | 1— | 5— | 15— | 45— | 65— |
|---|---|---|---|---|---|---|---|
| Males ... ... ... | 939 | 30 | 1 | 4 | 73 | 259 | 572 |
| Females ... ... | 847 | 18 | 7 | 3 | 44 | 156 | 619 |
| Totals ... | 1786 | 48 | 8 | 7 | 117 | 415 | 1191 |

## COMPARISON OF AGE DISTRIBUTION OF DEATHS IN 1930 AND 1952

TABLE 9

| Year | All ages | Under 1 | 1— | 5— | 15— | 45— | 65— |
|---|---|---|---|---|---|---|---|
| 1930 ... ... ... | 1704 | 111 | 36 | 31 | 234 | 443 | 849 |
| 1952 ... ... ... | 1786 | 48 | 8 | 7 | 117 | 415 | 1191 |

# CAUSES OF DEATHS

## Table 10

| Cause of Death | Number of Deaths | | | | | | Death Rates per 1,000 of population |
|---|---|---|---|---|---|---|---|
| | Urban Districts | | Rural Districts | | Whole County | | |
| | Males | Females | Males | Females | Males | Females | |
| 1. Tuberculosis, respiratory ... | 14 | 6 | 22 | 3 | 36 | 9 | 0.367 |
| 2. Tuberculosis, other ... ... | — | 2 | — | 2 | — | 4 | 0.033 |
| 3. Syphilitic Disease ... ... | 2 | 1 | — | — | 2 | 1 | 0.024 |
| 4. Diphtheria ... ... ... | — | — | — | — | — | — | 0.000 |
| 5. Whooping Cough ... ... | — | — | — | — | — | — | 0.000 |
| 6. Meningococcal Infections ... | — | — | — | — | — | — | 0.000 |
| 7. Acute Poliomyelitis ... ... | — | — | 1 | — | 1 | — | 0.008 |
| 8. Measles ... ... ... | — | — | — | — | — | — | 0.000 |
| 9. Other infective and parasitic diseases ... ... ... | 1 | 1 | 2 | — | 3 | 1 | 0.033 |
| 10. Malignant neoplasm, stomach | 30 | 23 | 35 | 17 | 65 | 40 | 0.857 |
| 11. Malignant neoplasm, lung bronchus ... ... ... | 16 | 8 | 7 | 1 | 23 | 9 | 0.261 |
| 12. Malignant neoplasm, breast ... | — | 21 | — | 8 | — | 29 | 0.237 |
| 13. Malignant Neoplasm, Uterus | — | 12 | — | 4 | — | 16 | 0.131 |
| 14. Other malignant and lymphatic neoplasms ... ... | 56 | 45 | 38 | 28 | 94 | 73 | 1.363 |
| 15. Leukaemia, aleukaemia ... | — | 2 | 1 | 1 | 1 | 3 | 0.033 |
| 16. Diabetes ... ... ... | 3 | 3 | — | 2 | 3 | 5 | 0.065 |
| 17. Vascular lesions of nervous system ... ... ... | 56 | 95 | 53 | 71 | 109 | 166 | 2.245 |
| 18. Coronary disease—angina ... | 75 | 53 | 45 | 22 | 120 | 75 | 1.592 |
| 19. Hypertension with heart disease ... ... ... | 10 | 16 | 11 | 10 | 21 | 26 | 0.384 |
| 20. Other heart disease ... ... | 80 | 85 | 59 | 65 | 139 | 150 | 2.359 |
| 21. Other circulatory disease ... | 33 | 39 | 26 | 31 | 59 | 70 | 1.053 |
| 22. Influenza ... ... ... | 3 | 1 | 2 | 1 | 5 | 2 | 0.057 |
| 23. Pneumonia ... ... ... | 13 | 9 | 7 | 9 | 20 | 18 | 0.310 |
| 24. Bronchitis ... ... ... | 28 | 14 | 25 | 11 | 53 | 25 | 0.637 |
| 25. Other diseases of respiratory system ... ... ... | 5 | 1 | 5 | 2 | 10 | 3 | 0.106 |
| 26. Ulcer of stomach and duodenum ... ... ... | 8 | 1 | 2 | — | 10 | 1 | 0.090 |
| 27. Gastritis, enteritis and diarrhœa ... ... ... | 1 | 3 | 3 | 3 | 4 | 6 | 0.081 |
| 28. Nephritis and nephrosis ... | 6 | 7 | 7 | 7 | 13 | 14 | 0.220 |
| 29. Hyperplasia of prostate ... | 9 | — | 14 | — | 23 | — | 0.188 |
| 30. Pregnancy, childbirth and abortion ... ... ... | — | — | — | 1 | — | 1 | 0.008 |
| 31. Congenital malformation ... | — | — | 1 | 1 | 1 | 1 | 0.016 |
| 32. Other defined and ill-defined diseases ... ... ... | 32 | 41 | 44 | 35 | 76 | 76 | 1.241 |
| 33. Motor vehicle accidents ... | 2 | — | 4 | 1 | 6 | 1 | 0.057 |
| 34. All other accidents ... ... | 11 | 10 | 27 | 9 | 38 | 19 | 0.465 |
| 35. Suicide ... ... ... | 3 | 3 | 1 | — | 4 | 3 | 0.057 |
| 36. Homicide and operations of war ... ... ... ... | — | — | — | — | — | — | 0.000 |
| Totals ... ... | 497 | 502 | 442 | 345 | 939 | 847 | 14.58 |

## ZYMOTIC MORTALITY

Five deaths occurred from the principal Zymotic diseases in 1952.

TABLE 11

| Disease | Number of Deaths | Death Rates per 1,000 of the population | |
|---|---|---|---|
| | | Caernarvonshire | England and Wales |
| Diphtheria | — | 0.00 | 0.00 |
| Whooping Cough | — | 0.00 | 0.00 |
| Meningococcal Infections | — | 0.00 | 0.00 |
| Acute poliomyelitis | 1 | 0.008 | 0.01 |
| Measles | — | 0.00 | 0.00 |
| Other Infections | 4 | 0.033 | 0.00 |

## DEATHS FROM THE MAIN DISEASES ALLOCATED TO DISTRICTS

TABLE 12

| District | Zymotic | | Heart | | Respiratory | | Tuberculosis | |
|---|---|---|---|---|---|---|---|---|
| | No. of Deaths | Death Rate | No. of Deaths | Death Rate | No. of Deaths | Death Rate | No. of Deaths | Death Rate |
| RURAL DISTRICTS | | | | | | | | |
| Nant Conway | 1 | 0.164 | 33 | 5.404 | 5 | 0.819 | 5 | 0.819 |
| Gwyrfai | 1 | 0.042 | 111 | 4.713 | 27 | 1.146 | 17 | 0.722 |
| Lleyn | 1 | 0.058 | 98 | 5.694 | 20 | 1.162 | 2 | 0.116 |
| Ogwen | — | 0.00 | 27 | 5.518 | 10 | 2.044 | 3 | 0.613 |
| URBAN DISTRICTS | | | | | | | | |
| Bangor | — | 0.00 | 66 | 4.776 | 12 | 0.868 | 6 | 0.434 |
| Bethesda | 1 | 0.227 | 30 | 6.809 | 5 | 1.135 | 5 | 1.135 |
| Betwsycoed | 1 | 1.344 | 3 | 4.032 | 1 | 1.344 | — | 0.00 |
| Caernarvon | — | 0.00 | 47 | 5.051 | 14 | 1.505 | 1 | 0.107 |
| Conway | — | 0.00 | 54 | 5.336 | 12 | 1.186 | 4 | 0.395 |
| Criccieth | — | 0.00 | 11 | 7.338 | 2 | 1.334 | — | 0.00 |
| Llandudno | — | 0.00 | 109 | 6.799 | 11 | 0.686 | 2 | 0.125 |
| Llanfairfechan | — | 0.00 | 17 | 5.565 | 4 | 1.309 | 1 | 0.327 |
| Penmaenmawr | — | 0.00 | 20 | 4.895 | 7 | 1.713 | — | 0.00 |
| Pwllheli | — | 0.00 | 15 | 3.979 | 3 | 0.796 | 1 | 0.265 |
| Portmadoc | — | 0.00 | 19 | 4.866 | 3 | 0.768 | 2 | 0.512 |
| RURAL DISTRICTS | 3 | 0.058 | 269 | 5.197 | 62 | 1.198 | 27 | 0.522 |
| URBAN DISTRICTS | 2 | 0.028 | 391 | 5.527 | 74 | 1.046 | 22 | 0.311 |
| TOTAL COUNTY | 5 | 0.041 | 660 | 5.388 | 136 | 1.110 | 49 | 0.40 |

## INFECTIOUS DISEASES

### Table 13

Incidence of Infectious Diseases (excluding Tuberculosis) in the Various Districts in the County during 1952.

| District | Scarlet Fever | Whooping Cough | Diphtheria | Measles | Pneumonia | Puerperal Pyrexia | Erysipelas | *Other Diseases | Totals |
|---|---|---|---|---|---|---|---|---|---|
| Rural Districts | | | | | | | | | |
| Nant Conway ... | 12 | 11 | — | 22 | — | — | — | 6 | 51 |
| Gwyrfai ... ... | 2 | 3 | — | 11 | 3 | — | — | 6 | 25 |
| Lleyn ... ... | 6 | 27 | — | 11 | — | — | — | — | 44 |
| Ogwen ... ... | 6 | 5 | — | 4 | — | — | — | — | 15 |
| Urban Districts | | | | | | | | | |
| Bangor ... ... | 21 | 30 | — | 5 | 1 | — | 1 | 8 | 66 |
| Bethesda... ... | 6 | 4 | — | 25 | — | — | — | — | 35 |
| Betwsycoed ... | — | — | — | 4 | — | — | — | — | 4 |
| Caernarvon ... | 3 | — | — | 5 | 1 | — | 1 | 10 | 20 |
| Conway ... ... | 14 | 7 | — | 4 | — | 1 | 2 | 15 | 43 |
| Criccieth ... ... | 1 | — | — | 15 | — | — | — | — | 16 |
| Llandudno ... | 5 | 67 | — | 43 | 9 | — | 4 | 42 | 170 |
| Llanfairfechan ... | — | — | — | — | 1 | — | — | 2 | 3 |
| Penmaenmawr ... | 3 | — | — | 6 | 4 | — | 2 | — | 15 |
| Pwllheli ... ... | — | — | — | 20 | 2 | — | — | — | 22 |
| Portmadoc ... | 2 | 4 | — | 10 | — | — | — | — | 16 |
| Totals ... ... | 81 | 158 | — | 185 | 21 | 1 | 10 | 89 | 545 |

*Other Diseases include :

| | |
|---|---|
| Chicken pox ... ... ... ... ... ... | 50 |
| Dysentery and food poisoning ... ... ... ... | 27 |
| Typhoid ... ... ... ... ... ... ... | — |
| Paratyphoid ... ... ... ... ... ... | — |
| Acute Poliomyelitis ... ... ... ... ... | 6 |
| Cerebro spinal fever ... ... ... ... ... | — |
| Meningococcal infections ... ... ... ... | 4 |
| Encephalitis ... ... ... ... ... ... | 1 |
| Ophthalmia Neonatorum ... ... ... ... | 1 |

### Table 14

| | Ophthalmia Neonatorum | | Pemphigus Neonatorum | | Puerperal Pyrexia | |
|---|---|---|---|---|---|---|
| | Domiciliary Confinements | Institutional Confinements | Domiciliary Confinements | Institutional Confinements | Domiciliary Confinements | Institutional Confinements |
| Number of cases notified ... ... | — | 1 | — | — | 1 | — |
| Number of cases visited by Officers of the Council ... ... ... | — | — | — | — | 1 | — |
| Number of cases for whom Home Nursing was provided ... | — | — | — | — | 1 | — |
| Number of cases removed to hospital ... ... ... | — | — | — | — | — | — |

# CHAPTER 3

## CARE OF EXPECTANT AND NURSING MOTHERS AND CHILDREN UNDER SCHOOL AGE

### Expectant and Nursing Mothers

Pre-natal clinics were established for the first time in 1938. I received complete collaboration throughout from Mr. O. V. Jones, the Council's Obstetrician. He and other staff of the County Hospital attend the Clinics as well as the County Council Midwives and Health Visitors. A Clinic is also held weekly at the County Hospital, Bangor. No interruption or dislocation of the service occurred in 1948. Additional clinics are required in Betwsycoed and Llanberis.

Post-natal mothers are also seen in the Clinics. Many obvious advantages accrue to mothers and staff from this arrangement of medical staffing.

Samples of blood are taken by the doctor attending the clinics from all expectant mothers making their first attendance, and are submitted to the Pathological Laboratory at the Caernarvon and Anglesey General Hospital, Bangor, for a Rhesus Factor and Wasserman or Kahn Tests. Expectant mothers are subsequently given a card with particulars of their Rhesus Factor.

Details of Attendances at the clinics are given in Table 15.

TABLE 15

| Clinic | Number of Women in Attendance | | Total Number of Attendances |
|---|---|---|---|
| | Total Number of Women who Attended | Number of New Cases who Attended | |
| Pre-Natal Clinics ... ... ... | 1064 | 786 | 4329 |
| Post-Natal Clinics ... ... ... | 468 | 465 | 553 |

The figures in this table do not include attendances at the County Hospital, Bangor.

Midwives Relaxation Clinics were established at Caernarvon, Penygroes, Pwllheli, Portmadoc and Llandudno in 1951, and at Penmaenmawr, Bangor, Dolgarrog, in 1952. The Clinics are attended by the Superintendent Midwife and by midwives from the surrounding areas. Expectant mothers are given instruction in relaxation. Emphasis is laid on the correct approach to confinement and mothers are advised on all aspects of the care of their own health and that of their babies during the early months of life. Although these clinics have only been established comparatively recently, satisfactory results are already being observed.

UNMARRIED MOTHERS are given every facility that the Council can offer in the care of their own and their children's health. Notification of all unmarried expectant mothers are sent to me immediately by Health

Visitors, District Nurses and Midwives with recommendations concerning the special needs of each one. Information is also obtained from Maternity Hospitals and Homes.

Those who cannot be confined in their own homes or who are unable to nurse their babies at home are admitted to Homes for Unmarried Mothers by arrangements with the Bangor Diocesan Council for Moral Welfare. Most of them are admitted some weeks before their confinement and are given training in one of the hostels until it is time to admit them to the Maternity Home. They may stay at the home for some time after the birth of their child. The cost of maintenance is borne by the County Council and regular reports on their progress are received. They are visited immediately upon their discharge by members of the nursing staff and are given advice in the care of their babies and assistance in rehabilitation. Eight unmarried expectant mothers were admitted to Mother and Baby Homes in 1952.

Delay in altering and decorating the premises prevented the opening of Bersham Hall Home for Unmarried Mothers in 1952. This work, however, has now been completed and the Home is to be opened this year.

One indication of the extent and efficiency of the Council's care for unmarried mothers is the illegitimate infant mortality rate, which is now frequently less than that of the legitimate rate. This table shows the reduction which has occurred in recent years :—

TABLE 16

| Year | Mortality Rates per 1,000 Live Births | |
|---|---|---|
| | Legitimate Infants | Illegitimate Infants |
| 1942 | 54.45 | 88.70 |
| 1943 | 55.36 | 18.75 |
| 1944 | 53.88 | 49.18 |
| 1945 | 53.80 | 93.56 |
| 1946 | 41.68 | 46.78 |
| 1947 | 54.26 | 44.58 |
| 1948 | 39.95 | 23.43 |
| 1949 | 35.38 | 29.41 |
| 1950 | 35.20 | 35.29 |
| 1951 | 44.01 | 30.61 |
| 1952 | 25.94 | 72.29 |

**Child Welfare**

Infant Welfare Clinics are established in 36 centres in the county. Each clinic has its own Committee of Voluntary Workers who have given invaluable service in the administration of the clinics and in providing for the comfort and entertainment of the mothers and children. A grant is made by the County Council to each clinic annually for the provision of light refreshments during clinic sessions and several Committees organise special teas or outings from voluntary subscriptions collected

at the Clinics. The Clinics are attended by the Health Visitor for the area and by the Assistant Medical Officers.

Despite continuous encouragement of parents by the Medical and Nursing Staff, I am sorry to say that attendances have not been as good as I would like them to be.

Some of the buildings in which clinics are held are most unsatisfactory. It is important to convey to mothers the right advice in congenial and healthy surroundings. It is equally important to continue emphasising the preventive function of the Clinic.

Babies are referred when necessary to the Paediatric Centres held at Bangor and Llandudno.

The Maternity and Child Welfare Committee have authorised the hire of special transport to convey mothers and children to the clinics in certain parts of the county where it would be difficult for mothers to attend because of lack of suitable public transport.

Facilities are available at all clinics for the mothers to purchase various brands of proprietary infant foods at special Clinic prices. Representatives of the Ministry of Food attend clinic sessions at most centres for the distribution of Welfare Foods under the Government's Welfare Food Scheme.

Details of the Clinics and attendances are given in Table 17 on pages 26-29.

## INFANT WELFARE CLINICS

TABLE 17

| Clinic Centre | Sessions Held | Day and Time of Meetings | Average Attendance per session | Number who attended for the first time | | Clinic Attended by |
|---|---|---|---|---|---|---|
| | | | | Under 1 year | Between 1 and 5 years | |
| ABER | | | | | | |
| Lecture Room College Farm. | Monthly | 2-0 p.m. to 4-0 p.m. 3rd Wednesday monthly | 8 | 3 | — | Health Visitor |
| ABERDARON | | | | | | |
| Village Hall, Aberdaron. | Monthly | 2-0 p.m. to 4-0 p.m. 4th Thursday monthly. | 13 | 4 | 7 | Assistant M.O.H. and Health Visitor. |
| ABERSOCH | | | | | | |
| Village Hall. | Monthly | 2-0 p.m. to 4-0 p.m. 3rd Wednesday monthly. | 12 | 7 | 5 | Assistant M.O.H. and Health Visitor. |
| BANGOR | | | | | | |
| General Clinic, Sackville Road. | Weekly | 10-30 a.m. to 4-0 p.m. Every Thursday. | 49 | 147 | 4 | Assistant M.O.H. and Health Visitor. |
| BETHEL | | | | | | |
| Village Hall. | Fortnightly | 2-0 p.m. to 4-0 p.m. 2nd and 4th Fridays monthly. | 12 | 13 | 1 | Health Visitor. |
| BETHESDA | | | | | | |
| A.T.C. Hut, Meurig Park. | Fortnightly | 2-0 p.m. to 4-0 p.m. 1st and 3rd Fridays monthly. | 34 | 61 | 8 | Assistant M.O.H. and Health Visitor. |
| BETWSYCOED | | | | | | |
| Memorial Hall. | Fortnightly | 2-0 p.m. to 4-0 p.m. 1st and 3rd Wednesdays monthly. | 15 | 31 | 21 | Assistant M.O.H. and Health Visitor. |
| CAERNARVON | | | | | | |
| Central Clinic, Shirehall Street. | Fortnightly | 2-0 p.m. to 4-0 p.m. 1st and 3rd Wednesdays monthly. | 42 | 91 | 9 | Assistant M.O.H. and Health Visitor. |
| CONWAY | | | | | | |
| Muriau Buildings, Rosehill Street. | Fortnightly | 2-0 p.m. to 4-0 p.m. 1st and 3rd Tuesdays monthly. | 19 | 23 | 1 | Assistant M.O.H. and Health Visitor. |
| CRICCIETH | | | | | | |
| Memorial Hall. | Monthly | 2-0 p.m. to 4-0 p.m. 3rd Tuesday monthly. | 30 | 21 | 3 | Assistant M.O.H. and Health Visitor. |

TABLE 17 (*continued*)

| Clinic Centre | Sessions Held | Day and Time of Meetings | Average Attendance per session | Number who attended for the first time | | Clinic Attended by |
|---|---|---|---|---|---|---|
| | | | | Under 1 year | Between 1 and 5 years | |
| DEGANWY<br>Church Hall. | Monthly | 2-0 p.m. to 4-0 p.m.<br>4th Friday monthly. | 12 | 6 | — | Health Visitor. |
| DEINIOLEN<br>Free Library. | Fortnightly | 2-0 p.m. to 4-0 p.m.<br>2nd and 4th Wednesdays monthly. | 15 | 25 | — | Assistant M.O.H. and Health Visitor. |
| DOLGARROG<br>Clinic Centre, Sillans. | Fortnightly | 1-30 p.m. to 4-0 p.m.<br>2nd and 4th Thursdays monthly. | 16 | 18 | 1 | Assistant M.O.H. and Health Visitor. |
| DOLWYDDELEN<br>Moriah Chapel Vestry. | Monthly | 3-0 p.m. to 4-0 p.m.<br>3rd Tuesday monthly. | 8 | 12 | 7 | Health Visitor. |
| *EDEYRN<br>New School | Monthly | 2-0 p.m. to 4-0 p.m.<br>2nd Tuesday monthly. | 2 | — | — | Health Visitor. |
| GARNDOLBENMAEN<br>Council School | Monthly | 2-0 p.m. to 4-0 p.m.<br>1st Thursday monthly. | 7 | 8 | — | District Nurse. |
| GROESLON<br>The Institute | Monthly | 2-0 p.m. to 4-0 p.m.<br>2nd Tuesday monthly. | 13 | 21 | 5 | Assistant M.O.H. and District Nurse. |
| LLANBEDROG<br>Church Hall. | Monthly | 2-0 p.m. to 4-0 p.m.<br>2nd Wednesday monthly. | 15 | 10 | 2 | Assistant M.O.H. and Health Visitor. |
| LLANBERIS<br>Capel Coch Vestry | Fortnightly | 2-0 p.m. to 4-0 p.m.<br>1st and 3rd Wednesdays monthly. | 64 | 26 | 2 | Assistant M.O.H. and Health Visitor. |
| LLANDUDNO<br>War Memorial Centre, Oxford Road. | Weekly | 10-0 a.m. to 4-0 p.m.<br>Every Tuesday | 28 | 127 | 13 | Assistant M.O.H. and Health Visitor. |

* Closed 31–7–52

TABLE 17 (*continued*)

| Clinic Centre | Sessions Held | Day and Time of Meetings | Average Attendance per session | Number who attended for the first time | | Clinic Attended by |
|---|---|---|---|---|---|---|
| | | | | Under 1 year | Between 1 and 5 years | |
| LLANDUDNO JUNCTION<br>Y.W.C.A. Hall. | Fortnightly | 2-0 p.m. to 4-0 p.m.<br>2nd and 4th Thursdays monthly. | 34 | 59 | 11 | Assistant M.O.H. and Health Visitor. |
| LLANFAIRFECHAN<br>Council Chambers. | Fortnightly | 2-0 p.m. to 4-0 p.m.<br>2nd and 4th Thursdays monthly. | 20 | 37 | 15 | Assistant M.O.H. and Health Visitor. |
| LLANRUG<br>Memorial Institute. | Fortnightly | 2-0 p.m. to 4 p.m.<br>1st and 3rd Thursdays monthly. | 28 | 17 | — | Assistant M.O.H. and Health Visitor. |
| NEVIN<br>Caersalem Chapel Vestry. | Monthly | 1-30 p.m. to 4-0 p.m.<br>2nd Friday monthly. | 30 | 49 | 19 | Assistant M.O.H. and Health Visitor. |
| PENMAENMAWR<br>Noddfa, Conway Road. | Fortnightly | 2-0 p.m. to 4-0 p.m.<br>1st and 3rd Fridays monthly. | 25 | 35 | 2 | Assistant M.O.H. and Health Visitor. |
| PENRHYN BAY<br>Penrhyn New Hall. | Fortnightly | 1-30 p.m. to 4-0 p.m.<br>1st and 3rd Thursdays monthly. | 23 | 34 | 1 | Assistant M.O.H. and Health Visitor. |
| PENYGROES<br>Drill Hall. | Fortnightly | 2-0 p.m. to 4-0 p.m.<br>2nd and 4th Tuesdays monthly. | 27 | 40 | 1 | Assistant M.O.H. and Health Visitor. |
| PENMACHNO<br>Public Hall. | Monthly | 2-0 p.m. to 4-0 p.m.<br>4th Tuesday monthly. | 18 | 19 | 6 | Assistant M.O.H. and Health Visitor. |
| PORTDINORWIC<br>Conservative Club. | Monthly | 2-0 p.m. to 4-0 p.m.<br>4th Thursday monthly. | 25 | 28 | 10 | Assistant M.O.H. and Health Visitor. |
| PORTMADOC<br>Snowdon Street Clinic. | Fortnightly | 2-0 p.m. to 4-0 p.m.<br>2nd and 4th Tuesdays monthly. | 42 | 49 | — | Assistant M.O.H. and Health Visitor. |

TABLE 17 (*continued*)

| Clinic Centre | Sessions Held | Day and Time of Meetings | Average Attendance per session | Number who attended for the first time | | Clinic Attended by |
|---|---|---|---|---|---|---|
| | | | | Under 1 year | Between 1 and 5 years | |
| PWLLHELI<br>British Legion Hall. | Fortnightly | 2-0 p.m. to 4-0 p.m.<br>1st and 3rd Tuesdays monthly. | 37 | 81 | 10 | Assistant M.O.H. and Health Visitor. |
| RHOSTRYFAN<br>Horeb Chapel Vestry. | Fortnightly | 1-30 p.m. to 4-0 p.m.<br>1st and 3rd Tuesdays monthly. | 13 | 18 | 1 | Assistant M.O.H. and Health Visitor. |
| SARN<br>Memorial Hall. | Monthly | 2-0 p.m. to 4-0 p.m.<br>1st Thursday monthly. | 25 | 26 | 7 | Assistant M.O.H. and Health Visitor. |
| TREGARTH<br>Wesley Hall | Fortnightly | 2-0 p.m. to 4-0 p.m.<br>1st and 3rd Wednesdays monthly. | 17 | 16 | 1 | Assistant M.O.H. and Health Visitor. |
| TREVOR<br>Maes-y-Neuadd Vestry | Monthly | 2-0 p.m. to 4-0 p.m.<br>3rd Thursday monthly. | 17 | 14 | 10 | Assistant M.O.H. and District Nurse. |
| WAENFAWR<br>Church Room | Fortnightly | 1-30 p.m. to 4-0 p.m.<br>2nd and 4th Wednesdays monthly. | 16 | 16 | — | Assistant M.O.H. and Health Visitor. |
| | | | — | 1192 | 183 | |

**Care of Premature Infants**

A comprehensive service is available in the county for the care of premature infants and the efficiency of the service is ensured by the excellent co-operation between the Medical and Nursing Staffs of the County Hospital and the Health Department. All babies weighing 4 lbs. and under are recommended for admission to the County Hospital with their mothers, and a special ambulance fitted with a heated cot and a supply of oxygen is provided for their conveyance under the care of a nurse from the hospital. Four special outfits for nursing infants at home weighing between 4 lbs. and 5½ lbs, are retained at Caernarvon, Dolgarrog and Pwllheli. Additional outfits are retained in the County Hospital. General practitioners and midwives are aware of the arrangements for obtaining the equipment when necessary. The outfits consist of specially prepared cots fitted with heating and oxygen apparatus. Special clothing and equipment are also provided and scales for Test Feeding. Midwives have received special instruction in the care of premature babies. Details of premature infants born in 1952 are given in Table 18.

## Table 18

| Number and Place of Birth | | | | Weight at Birth | Transferred to Hospital | | Died in first 24 hours | | | | Died between 2nd and 7th days | | | | Died between 8th and 28th day | | | | Survived 28 days | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Home | N.H. | Hos. | Total | | Home | N.H. | Home | N.H. | Hospital | | Home | N.H. | Hospital | | Home | N.H. | Hospital | | Home | N.H. | Hospital | | Total |
| | | | | | | | | | Hos. | Tr. | | | Hos. | Tr. | | | Hos. | Tr. | | | Hos. | Tr. | |
| — | — | 3 | 3 | 2 lb. 3 oz. or less ... ... | — | — | — | — | 1 | — | — | — | 2 | — | — | — | — | — | — | — | — | — | — |
| 2 | — | 5 | 7 | 2 lb. 4 oz.—3 lb. 4 oz. ... | 2 | — | — | — | 1 | 1 | — | — | 2 | — | — | — | — | — | — | — | 2 | 1 | 3 |
| 1 | 1 | 15 | 17 | 3 lb. 4 oz.—4 lb. 6 oz. ... | — | 1 | — | — | 1 | — | — | — | 1 | — | — | — | — | — | 2 | — | 12 | 1 | 15 |
| 1 | — | 15 | 16 | 4 lb. 6 oz.—4 lb. 15 oz. ... | 1 | — | — | — | — | — | — | — | 1 | — | — | — | — | — | 5 | — | 9 | 1 | 15 |
| 12 | 4 | 39 | 55 | 4 lb. 15 oz.—5 lb. 8 oz. ... | 1 | 1 | — | — | 1 | — | — | — | 1 | — | — | — | 1 | — | 29 | 1 | 20 | 2 | 52 |
| 16 | 5 | 77 | 98 | Totals ... ... | 4 | 2 | — | — | 4 | 1 | — | — | 7 | — | — | — | 1 | — | 36 | 1 | 43 | 5 | 85 |

## DENTAL CARE

The dental staff comprised two Assistant Dental Officers from January to May 1952. A third Assistant was appointed in May, and the three officers between them were responsible for the whole of the dental services throughout the county. The dental establishment provides for a fourth Assistant Dental Officer and a senior Dental Officer. A Senior Dental Officer was appointed during the year but later declined to accept the appointment.

Expectant and Nursing Mothers found to require dental treatment at the Council's Pre- and Post-Natal Clinics are advised and encouraged to consult their private dentists. Children of pre-school age are frequently treated at the School Dental Clinics. It has been impossible, however, to provide continuous and systematic inspection and treatment for mothers and young children because of the shortage of Dental Officers. It is considered impracticable in such a sparsely populated county to arrange special dental clinics attended by private dentists. Details of the examination and treatment of children of pre-school age during 1952 are given in this table.

TABLE 19

| Year | No. of children examined | No. found to require treatment | No. of children treated | No. of extractions | No. of fillings | No. of administrations of general anæsthetic |
|---|---|---|---|---|---|---|
| 1952 | 1535 | 312 | 67 | 21 | 45 | 5 |

## OTHER SERVICES

Similar facilities are available to children of pre-school age as are offered to school children for consultation and treatment at the Orthopaedic, Ear, Nose and Throat, Ophthalmic, Orthoptic, Skin, and Paediatric Clinics.

## ORTHOPAEDIC TREATMENT

Children of pre-school age found to be suffering from orthopaedic defects at the Council's Clinics and those referred to the Department by their own doctors were examined by the Specialist Officer at the Orthopaedic Survey Clinics and received treatment by the Council's Physiotherapist at the After-Care Clinics. Hospital treatment for those who required it was arranged through the Regional Hospital Board. Surgical fittings and modifications to footwear were also ordered by the Department at the expense of the Hospital Board.

Ultra Violet Ray treatment was available at five centres to children referred by Assistant Medical Officers and to children whose private doctors requested treatment.

Details of the Survey, After-Care and Ultra Violet Ray Clinics are given in these tables :—

## ORTHOPAEDIC SURVEY CLINICS

TABLE 20

| Centre | Number of Cases | | Treatment Recommended | | | | |
|---|---|---|---|---|---|---|---|
| | New | Old | Hospital | Appliances | Massage & S.R.E. | Observation | Others |
| Bangor ... ... | 17 | 41 | 1 | 38 | 10 | 17 | — |
| Caernarvon ... ... | 34 | 87 | — | 49 | 15 | 26 | 1 |
| Llandudno ... ... | 43 | 34 | 1 | 48 | 8 | 21 | — |
| Pwllheli ... ... | 40 | 52 | — | 50 | 11 | 22 | — |
| Totals ... | 134 | 214 | 2 | 185 | 44 | 86 | 1 |

## AFTER CARE CLINICS

TABLE 21

| Centre | No. of Sessions held | Total Attendances |
|---|---|---|
| Bangor ... ... ... ... | 41 | 205 |
| Caernarvon ... ... ... | 79 | 320 |
| Llandudno ... ... ... | 44 | 102 |
| Pwllheli ... ... ... ... | 48 | 98 |
| Portmadoc ... ... ... | 46 | 158 |
| Totals ... ... | 258 | 883 |

## ULTRA VIOLET RAY CLINICS

TABLE 22

| Centre | No. of Sessions Held | Total Attendances |
|---|---|---|
| Bangor ... ... ... ... | 34 | 248 |
| Caernarvon ... ... ... | 77 | 597 |
| Llandudno ... ... ... | 41 | 362 |
| Pwllheli ... ... ... ... | 44 | 333 |
| Portmadoc ... ... ... | 31 | 53 |
| Totals ... ... | 227 | 1593 |

## SPEECH THERAPY

The Council were able to obtain the services of a Speech Therapist during 1952 and this service is available to children of pre-school age who require treatment for speech defects. I need not stress the effect on a child's mind, personality, happiness and future life of a bad speech defect, and it is important that treatment be given during the earliest practicable stages of the child's life.

## SAVING OF INFANT LIVES

### Neo Natal Rates

The Neo-natal rate represents the number of babies that die during the first month of life among each 1,000 babies born. This rate reflects directly the special care given to babies immediately after delivery and during the first month of their lives. Indirectly, of course, the Neo-natal rate is affected by the special care given to the mother before her child is born. If we devote to her such care and attention that she is able, out of her own body, to produce a strong, healthy, robust baby, the probability of the baby surviving its first month of life is thereby increased. Table 25 on page 36 records how this rate has been halved during the last ten years and the rate of 17.62 per 1,000 live births in 1952 is the lowest ever recorded in this county.

Table 24 on page 35 gives an analysis of the causes of Neo-natal deaths in England and Wales during 1945 and the percentage composition of the causes of death. Congenital defects and prematurity represent 50 per cent of the causes of Neo-natal deaths, and until we know more about these conditions, it will be difficult to eliminate them as a cause of death. It will be readily appreciated that any reduction of the Neo-natal rate and any success achieved in the special care of the pregnant mother has a direct effect in reducing the Infant Mortality Rate.

### Stillbirth Rate

This rate also reflects the special care given to the mother before her child is born. It represents the number of babies born dead per 1,000 babies born (stillbirths plus live births). Table 26 on page 36 shows how this rate has fallen very significantly in recent years. In our successful efforts to prevent a baby being born dead, we increase the possibility of the Neo-natal rate and the Infant Mortality rate rising. Not all babies conceived have the vital powers to live in spite of all our efforts. We can only with our present knowledge and resources postpone their deaths. Naturally, therefore, if we postpone their deaths until after their births, then the number of children that die during the first month of extra-uterine life is relatively increased and so, therefore, is the Neo-natal rate. But I said earlier that the special care devoted to the pregnant mother assists her to produce a healthy baby, and we cannot, of course, even if we wished to, distinguish or discriminate between the baby that is likely to be stillborn and the baby likely to be born alive. It is, therefore, even more gratifying to realise that the stillbirth rates, the Neo-natal rates and the Infant Mortality rates are all steadily decreasing. I reported in 1949 that these rates were the lowest ever recorded in the history of this county and I am glad to report that the Neo-natal rate and Infant Mortality rate for 1952 are even lower.

If the Infant Mortality Rate had remained throughout the period 1901 to 1952 as high as it was in 1901, at least 7,900 more babies would have died during the period. We may justifiably claim, therefore, that

as a result of the increasingly extensive and efficient care given to mothers and children, the lives of 7,900 children have been saved.

**Reflections**

We can all be proud of the results achieved, but while having a sense of pride, we must not be complacent. Our rates are usually higher than the average for England and Wales, and I will not be satisfied until they are consistently lower than these averages, and as low as those recorded in some of our Dominions and in some Scandinavian countries.

## PRE AND POST NATAL CLINICS

TABLE 23

| Year | Number of Women who Attended | | Total Attendances |
|---|---|---|---|
| | Pre-Natal Clinic | Post-Natal Clinic | |
| 1939 ... ... | 278 | 44 | 644 |
| 1940 ... ... | 368 | 133 | 1,038 |
| 1941 ... ... | 784 | 213 | 2,203 |
| 1942 ... ... | 839 | 336 | 2,915 |
| 1943 ... ... | 1,127 | 318 | 3,953 |
| 1944 ... ... | 1,090 | 478 | 4,658 |
| 1945 ... ... | 945 | 468 | 4,426 |
| 1946 ... ... | 1,384 | 479 | 6,128 |
| 1947 ... ... | 1,325 | 571 | 6,647 |
| 1948 ... ... | 1,878 | 528 | 8,959 |
| *1949 ... ... | 976 | 253 | 4,640 |
| *1950 ... ... | 1,002 | 462 | 4,509 |
| *1951 ... ... | 983 | 528 | 4,566 |
| *1952 ... ... | 1,064 | 468 | 4,882 |

* Does not include attendances at the County Hospital.

## CAUSES OF NEO-NATAL DEATHS

### England and Wales 1945

TABLE 24

| Causes of Neo-Natal Deaths | England & Wales, 1945 | |
|---|---|---|
| | Per Cent | Rate per 1,000 Live Births |
| Infections, Pneumonia, etc. ... ... ... ... | 9.0 | 2.2 |
| Congenital Defects ... ... ... ... ... | 12.5 | 3.1 |
| Birth Injury ... ... ... ... ... | 9.5 | 2.4 |
| Prematurity only ... ... ... ... ... | 37.5 | 9.5 |
| Blood Disease of Newborn ... ... ... ... | 4.0 | 1.0 |
| Other and Ill-defined causes ... ... ... ... | 27.5 | 6.8 |
| | 100.0 | 25.0 |

## NEO-NATAL DEATHS

TABLE 25

| Year | Live Births | Neo-Natal Deaths | Rate per 1,000 Live Births |
|---|---|---|---|
| 1943 ... | 1,930 | 69 | 35.7 |
| 1944 ... | 1,946 | 71 | 36.4 |
| 1945 ... | 1,695 | 63 | 37.1 |
| 1946 ... | 2,042 | 55 | 26.9 |
| 1947 ... | 2,184 | 64 | 29.3 |
| 1948 ... | 2,005 | 39 | 19.9 |
| 1949 ... | 1,854 | 37 | 19.9 |
| 1950 ... | 1,761 | 38 | 21.58 |
| 1951 ... | 1,734 | 36 | 20.76 |
| 1952 ... | 1,702 | 30 | 17.62 |

## STILLBIRTH RATES OF WHOLE COUNTY

TABLE 26

| Year | Stillbirths | Rate per 1,000 Total Births |
|---|---|---|
| 1933 ... ... | 100 | 57.1 |
| 1934 ... ... | 89 | 52.9 |
| 1935 ... ... | 87 | 50.0 |
| 1936 ... ... | 83 | 49.4 |
| 1937 ... ... | 86 | 50.5 |
| 1938 ... ... | 92 | 53.2 |
| 1939 ... ... | 77 | 44.4 |
| 1940 ... ... | 82 | 49.0 |
| 1941 ... ... | 66 | 36.4 |
| 1942 ... ... | 96 | 47.1 |
| 1943 ... ... | 61 | 30.6 |
| 1944 ... ... | 60 | 29.9 |
| 1945 ... ... | 48 | 27.5 |
| 1946 ... ... | 54 | 25.8 |
| 1947 ... ... | 55 | 24.5 |
| 1948 ... ... | 51 | 24.3 |
| 1949 ... ... | 45 | 23.7 |
| 1950 ... ... | 39 | 21.6 |
| 1951 ... ... | 46 | 25.8 |
| 1952 ... ... | 44 | 25.2 |

## CARE OF CHILDREN

The Children's Officer performs the duties relating to the care of children deprived of a normal home life, but close liaison is maintained between the Children's Department and the Health Department. Regular visits are made by Health Visitors to such children under five years of age as part of their normal duties and advice is given to foster parents

regarding the health and care of the children. Notification is sent immediately to the Children's Officer if any child under her care is found to require treatment, and every assistance is given to ensure that treatment is obtained.

Medical inspection and supervision of the children at the Blodwel Children's Home is performed by one of the Assistant Medical Officers, who also annually inspects the home. The opening of a Children's Nursery at Blodwel in 1950 contributed a little to the Children's Committee's endeavour to provide suitable and sufficient nursery accommodation in the county, and although this nursery has only accommodation for eight children, it has at least enabled some children to be removed from the atmosphere of an adult institution to environments much better suited to their needs. The Committee are very conscious of the need for additional nursery accommodation and are very disappointed because suitable premises for establishing a second nursery have not been available so far.

There is close liaison between the Health Department and the Children's Department in the arrangements made for the adoption of children. The advice of the Department is sought by the Children's Officer concerning the suitability of prospective homes for children to be adopted, and supervisory visits are made to children who have been placed with " parents " for trial before actual adoption.

CHAPTER 4

## MIDWIFERY

Four full-time and 44 part-time midwives were employed by the Council at the end of 1952. The 44 part-time midwives also acted as Home Nurses, a practise which should be discontinued as soon as sufficient staff becomes available.

I maintain medical supervision of the midwives. The County Supervisor of Midwives supervises all midwives employed by the County Council, midwives in private practice and midwives employed in private nursing homes. She also examines the records of midwives employed at two Maternity Homes administered by the Regional Hospital Board, where there are no resident Medical Officers. Midwives attended all domiciliary confinements during the year and visited homes before and after confinement of mothers in hospital.

Forty six of the midwives employed in the county are qualified to administer gas and air analgesia and forty two sets of apparatus are provided for their use. Additional apparatus will be purchased as required. Gas and air analgesia was administered to 204 mothers during 1952, 117 cases when acting as midwife and 87 cases when acting as Maternity Nurse.

All Midwives have received full instructions in the administration of Pethidine and the conditions under which it is to be obtained and used. Pethidine was given to 193 mothers during the year—in 80 instances when the midwife acted as a midwife and in 113 instances when acting as a Maternity Nurse.

Much of the success of the Domiciliary Midwifery Services in the county is due to the excellent co-operation between doctors undertaking maternity medical services and the midwives, in the pre-natal care of expectant mothers and during the time of confinement and lying-in periods.

All midwives attended Pre-natal Clinics in centres adjoining their areas and Special Midwives Relaxation Clinics established during the last two years where expectant mothers received full instruction in their preparation for childbirth. Expectant mothers who were unable to attend at these clinics were taught relaxation and given advice in their own homes by the midwives.

The dual duties of District Nurse/Midwife in a rural county like Caernarvonshire would be almost impossible to perform without suitable means of transport because of the heavy and cumbersome equipment that the midwives have to carry to the cases residing in remote areas. County Council cars have, therefore, been provided to midwives in 28 areas and 20 midwives use their own private cars, some of which have been purchased through the Council's Assisted Purchase Scheme.

The excellent co-operation which has always existed between the Medical and Nursing Staff of the County Hospital, Bangor, and the staff of the County Health Department has ensured the smooth running of the mutual arrangements made for the selection of women who are recommended for confinement in hospital. Reports on the social and

home circumstances of expectant mothers are submitted by the Council midwives to the doctor in attendance at the Council's Pre-natal Clinics. The doctor, who is a member of the County Hospital Staff, considers these reports in conjunction with his own medical observations, and recommends confinement in hospital if he considers it necessary. It often happens, due to overcrowding of the wards and shortage of staff in the County Hospital, that mothers are discharged before the fourteenth day after confinement, but the midwife is notified beforehand by the hospital staff of the discharge of the mother in order to ensure continuity of supervision and advice.

All midwives are given facilities periodically to attend Refresher Courses and special courses are occasionally arranged for them. During the last four years 137 attendances have been made at Refresher Courses by the Council's midwives. A branch of the College of Midwives meets monthly in Bangor at which lectures are delivered. Because the meetings are regarded as providing opportunities for education, the County Council makes an annual grant of £10 to the branch.

A course in Relaxation specially arranged in Birmingham at my request for Caernarvonshire midwives has now been accepted as a National Course by the Royal College of Midwives and is held quarterly. Arrangements are in operation between my Department and the County Hospital, Bangor, for providing domiciliary training for pupil midwives, and pupils are seconded for this training to midwives employed by the County Council. During the last four years 38 pupil midwives received training in the county.

Maternity Outfits of an approved type are supplied to all midwives and 438 were given free during the year.

Medical aid was summoned for 33 cases during the year. In 21 of these cases the Medical Practitioners had arranged to provide the patient with Maternity Medical Services under the National Health Services.

Details of the midwives practising in the county and the work performed by them are given in these tables :

TABLE 27

## (1) Midwives

| Midwives | Number Practising | | |
|---|---|---|---|
| | Domiciliary Midwives | Midwives in Institutions | Total |
| (*a*) Employed by the County Council | 50 | — | 50 |
| (*b*) Employed by voluntary organisations : | | | |
| (i) Under arrangements with the Council ... ... ... | — | — | — |
| (ii) Otherwise ... ... ... | — | — | — |
| (*c*) Employed by the Hospital Management Committee ... ... | — | 28 | 28 |
| (*d*) In private practice (including Maternity Homes) ... ... ... | 2 | 2 | 4 |
| Totals ... ... ... | 52 | 30 | 82 |

## (2) Confinements Attended

| By Midwives | Domiciliary Cases | | Cases in Institutions | | Total | |
|---|---|---|---|---|---|---|
| | As Midwives | As Maternity Nurses | As Midwives | As Maternity Nurses | As Midwives | As Maternity Nurses |
| (i) Employed by the Council ... | 200 | 245 | — | — | 200 | 245 |
| (ii) Employed by Voluntary Organisations :— | | | | | | |
| (*a*) Under arrangements with the Council ... ... | — | — | — | — | — | — |
| (*b*) Otherwise ... ... | — | — | — | — | — | — |
| (iii) Employed by the Hospital Management Committee... | — | — | 1296 | 419 | 1296 | 419 |
| (iv) In private practice ... ... | 6 | 5 | 2 | 81 | 8 | 86 |
| Totals ... ... | 206 | 250 | 1298 | 500 | 1504 | 750 |

CHAPTER 5

## HEALTH VISITING

This service was performed by a Superintendent and nineteen Health Visitors and School Nurses during 1952. The Infectious Diseases Nurse performed certain Health Visiting duties in one small area and three District Nurse/Midwives for whom dispensations were granted by the Ministry of Health, acted as part-time Health Visitors in areas where there were no full-time Health Visitors. Their duties included the general administration of and giving advice in Infant Welfare and Pre- and Post-Natal Clinics, advising in the homes of parents and foster-parents on the best means of promoting their own and their families' health, attendance at school medical inspections and periodic examinations of children attending schools in their areas; home teaching and health education for the prevention of infectious and other diseases, visiting and advising families suffering from tuberculosis and other illnesses; visiting of mental defectives, and the visiting of aged persons. The areas now provided with full-time Health Visitors are much too large and consequently the multifarious duties which require to be performed have to be seriously curtailed.

Facilities are granted by the Council to suitable qualified applicants for receiving training as Health Visitors. The pupils are given practical training within the county for six months and additional training at one of the recognised Training Centres. Two pupils have been trained since 1948.

Refresher Courses have been provided for six Health Visitors during the last four years.

A precis of the work performed by the Health Visitors during the year is given in this table :

## Table 28

| | |
|---|---|
| No of visits to children under one year of age : | |
| First Visits ... ... ... ... ... ... ... | 1,677 |
| Total Visits ... ... ... ... ... ... ... | 17,821 |
| No of visits to children between 1 and 5 years of age : | |
| First Visits ... ... ... ... ... ... ... | 86 |
| Total Visits ... ... ... ... ... ... ... | 22,752 |
| No. of other visits : | |
| Housing and Sanitation ... ... ... ... ... | 197 |
| Mental Defectives ... ... ... ... ... ... | 386 |
| Home conditions of children ... ... ... ... ... | 123 |
| Old People ... ... ... ... ... ... ... | 264 |
| General illness ... ... ... ... ... ... ... | 73 |
| Tuberculosis ... ... ... ... ... ... ... | 3,423 |
| Infectious Diseases ... ... ... ... ... ... | 483 |
| Miscellaneous Visits ... ... ... ... ... ... | 2,917 |
| No. of attendances (half-day sessions) at : | |
| Pre- and Post-Natal Clinics ... ... ... ... ... | 315 |
| Infant Welfare Clinics ... ... ... ... ... ... | 742 |
| General Clinics ... ... ... ... ... ... ... | 115 |
| Other Clinics ... ... ... ... ... ... ... | 275 |
| School Health : | |
| Follow-up visits to homes ... ... ... ... ... | 1,191 |
| Follow-up visits to schools ... ... ... ... ... | 639 |
| Visits concerning uncleanliness (*a*) to homes ... ... | 524 |
| (*b*) to schools ... ... | 541 |
| No. of attendances at School Medical Inspections (half-day sessions) ... ... ... ... ... ... ... | 416 |
| Minor ailments treated ... ... ... ... ... ... | 1,302 |
| No. of attendances for treatment ... ... ... ... | 2,788 |
| No. of cleanliness examinations... ... ... ... ... | 72,463 |
| No. of other visits ... ... ... ... ... ... | 833 |

CHAPTER 6

## HOME NURSING

Four full-time and forty-four part-time Home Nurses performed this service during 1952. The forty-four part-time District Nurses also acted as District Midwives. Their duties included regular visits to sick persons and the administration of intramuscular and intravenous injections at the direction of general practitioners. In addition to their normal duties they are responsible for the local supervision of Home Helps and they assist at Infant Welfare Clinics and at School Medical Inspections. They also treat a considerable amount of minor ailments among school children and others.

It has been observed that the character of the work undertaken by District Nurses has altered in recent years—there is less need for such things as surgical dressings, and more time has to be devoted to the injection of various preparations prescribed by the family doctors. District Nurses should develop the facility of teaching because valuable advice and guidance can be given where nurses visit homes over a prolonged period.

Co-operation between family doctors and the District Nurses has always been good and general practitioners readily obtain the services of the nurses for their patients whenever they have considered it necessary. There are no special arrangements for the provision of a night service, but whenever the services of a District Nurse have been required during the night, the demand has always been met with the utmost willingness by the nurses throughout the county.

During the last four years twelve nurses have received the Queen's District Training at the expense of the Council, and all Queen's Nurses have attended the Spring School organised by the Association of Queen's Nurses.

Details of the work performed during 1952 are given in this table :

TABLE 29

| Type of Case Attended | Analysis of Cases | | | Total Visits during the year |
|---|---|---|---|---|
| | No. on Register at the beginning of the year | No. of new cases during the year | No. on Register at the end of the year | |
| Surgical ... ... ... ... | 146 | 1,724 | 163 | 32,869 |
| Medical ... ... ... | 401 | 3,799 | 457 | 77,049 |
| Infectious Diseases ... ... | — | 72 | 2 | 128 |
| Tuberculosis ... ... ... | 15 | 115 | 29 | 5,433 |
| Other ... ... ... ... | 16 | 3,568 | 13 | 5,299 |
| Totals ... ... | 578 | 9,278 | 664 | 120,778 |

# CHAPTER 7

## VACCINATION AND IMMUNISATION

### Vaccination

Vaccination against Smallpox was performed partly by the County Council's own medical staff and partly by general medical practitioners, who received a fee from the County Council for each completed record card sent to the County Medical Officer of Health. The Council's Assistant Medical Officers vaccinate at Infant Welfare and General Clinics throughout the county, and special Clinic Sessions were held in some areas.

When vaccination ceased to be compulsory in July, 1948, there was a marked reduction in the number of children vaccinated in the latter half of that year and in 1949. It was necessary to re-educate parents and convince them of the value of this service to their children. Continued persuasion and teaching by Assistant Medical Officers and Health Visitors over the last four years has, I am glad to say, helped to produce an increase in the number of children vaccinated but much work remains to be done to ensure that a much bigger percentage of the children born annually in the county are vaccinated.

Details of vaccinations performed in 1952 are given in this table :

TABLE 30

| No. of Children | Age at time of Vaccination | | | | Total |
|---|---|---|---|---|---|
| | Under 1 | 1—4 | 5—14 | Over 15 | |
| Vaccinated ... ... | 487 | 394 | 31 | 68 | 980 |
| Re-Vaccinated ... | — | 5 | 14 | 173 | 192 |

### Immunisation

Immunisation against Diphtheria was performed by the Council's Assistant Medical Officers and by General Practitioners. The number of children who completed the full course of immunisation in 1952 was 1,218, of whom 913 were immunised by the Assistant Medical Officers, and 305 by General Practitioners.

The Council's Medical and Nursing Staff are continuously impressing on parents the importance of having their children immunised against diphtheria during the first year of their lives. Posters are displayed in clinics and on public notice boards, and notices are periodically inserted in the press in order to secure the immunisation of as many children as possible.

Birthday immunisation cards have been used in some areas. Particular attention is given to Propaganda at Health Exhibitions.

Immunisation against Diphtheria was originally introduced in Caernarvonshire early in 1939. Table 31 demonstrates the remarkable fall in incidence and mortality.

Of the 1218 children who completed the first course of immunisation in 1952, 579 were under one year of age, 575 between 1 and 5 years of age, and 64 between 5 and 14 years of age.

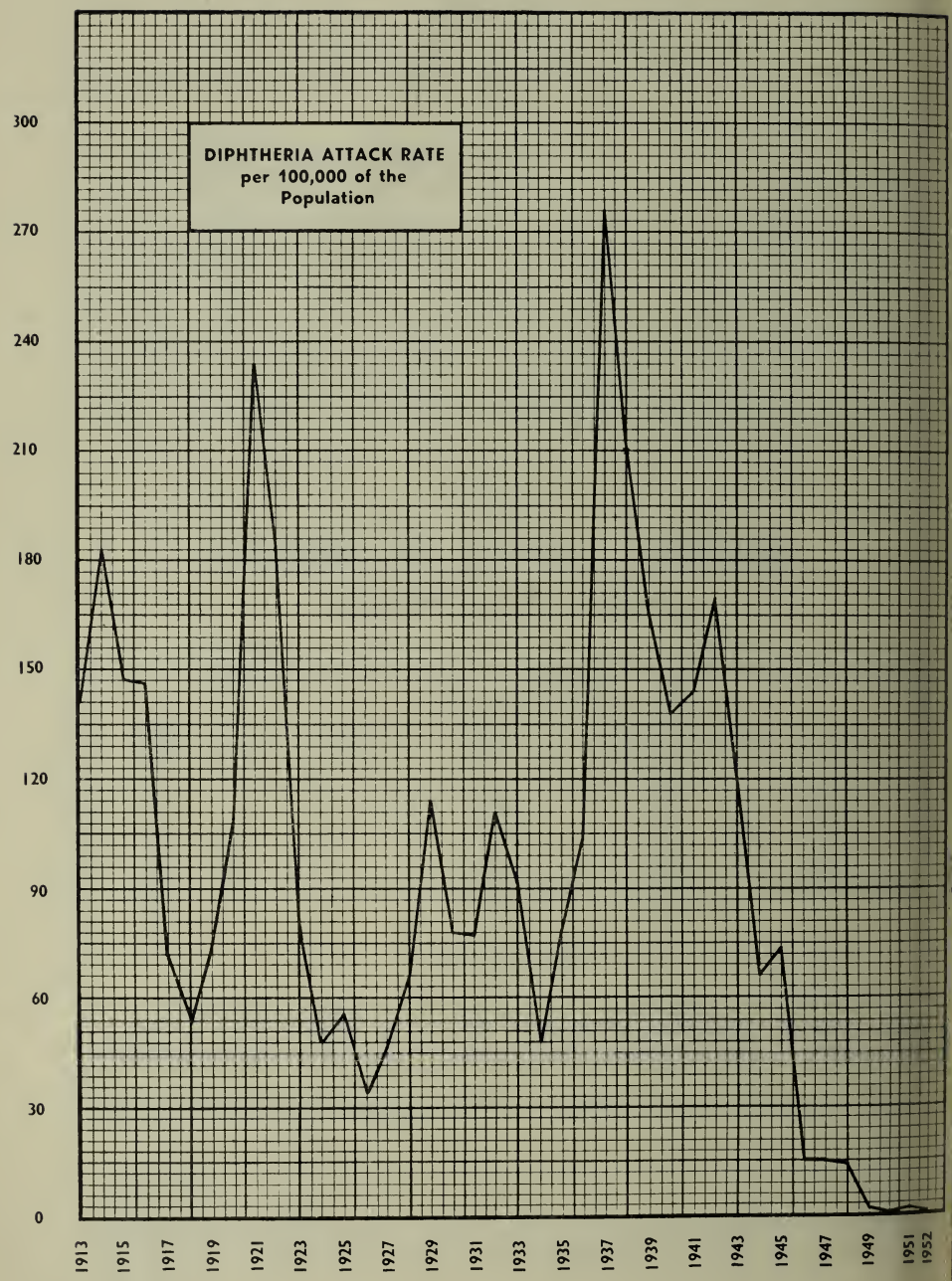
The records of children who have completed their first course of immunisation are maintained so that they are given the opportunity of receiving "boosting" injections approximately five years after the original protection. Boosting injections are given by the Assistant School Medical Officers at School Medical Inspections or at Special Clinics which are arranged when necessary. Private doctors also administer boosting injections to their child patients and the records sent in by them are entered on the children's original records in the Health Department.

TABLE 31

**DIPHTHERIA—INCIDENCE AND MORTALITY**

**Rates per 100,000 Population**

| Year | Incidence | | Mortality | |
|---|---|---|---|---|
| | Cases Notified | Attack Rate | Deaths | Death Rate |
| 1939 | 202 | 169 | 8 | 7 |
| 1940 | 175 | 137 | 10 | 8 |
| 1941 | 204 | 143 | 10 | 6 |
| 1942 | 242 | 176 | 8 | 7 |
| 1943 | 159 | 120 | 3 | 2 |
| 1944 | 85 | 67 | 3 | 2 |
| 1945 | 91 | 74 | 3 | 3 |
| 1946 | 19 | 15 | 1 | 1 |
| 1947 | 19 | 15 | — | — |
| 1948 | 18 | 14 | — | — |
| 1949 | 2 | 1.6 | — | — |
| 1950 | 1 | 0.8 | 1 | 0.8 |
| 1951 | 2 | 1.6 | — | — |
| 1952 | — | — | — | — |


DIPHTHERIA ATTACK RATE
per 100,000 of the
Population
300
270
240
210
180
150
120
90
60
30
0
1913
1915
1917
1919
1921
1923
1925
1927
1929
1931
1933
1935
1937
1939
1941
1943
1945
1947
1949
1951
1952

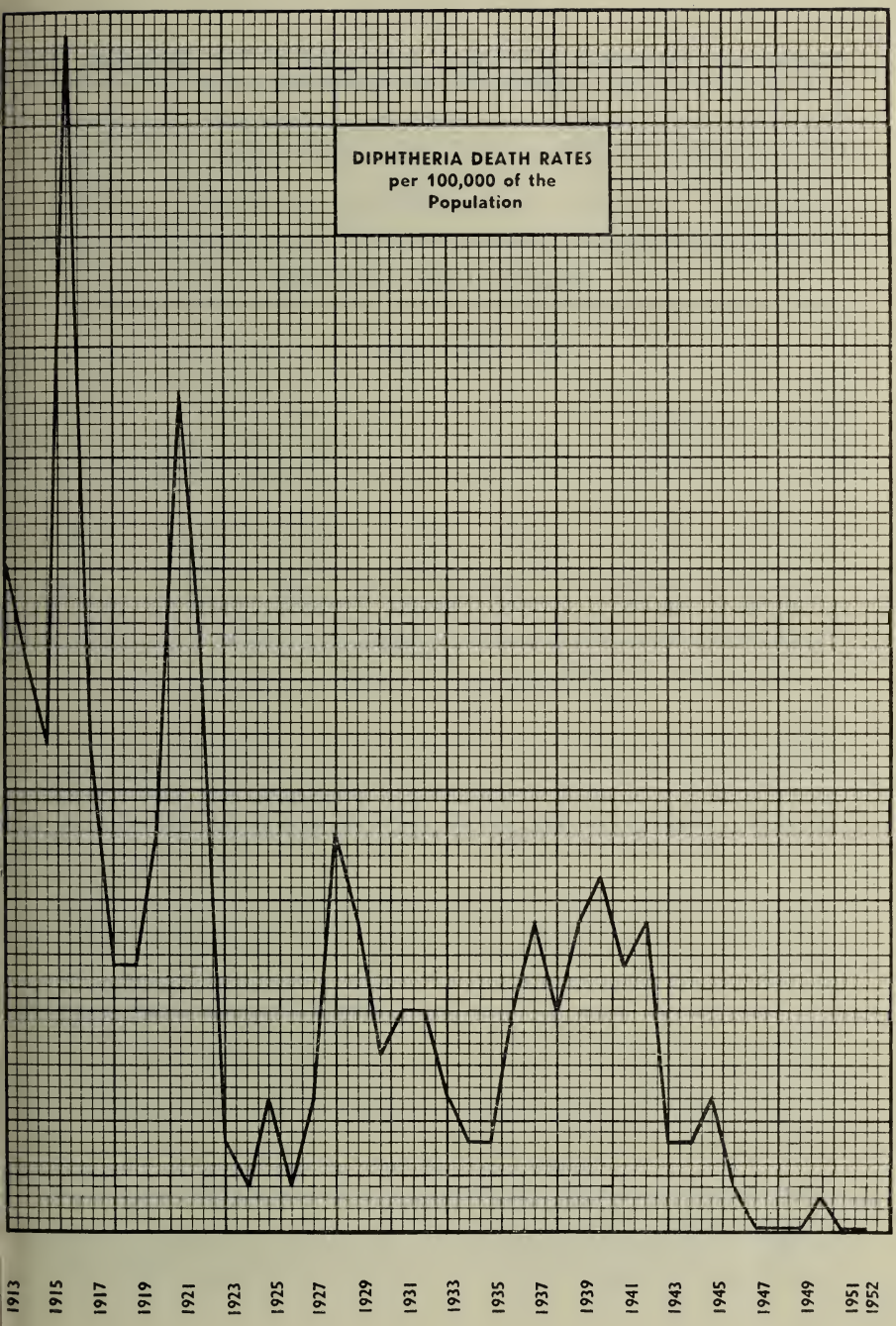

DIPHTHERIA DEATH RATES
per 100,000 of the
Population
1913
1915
1917
1919
1921
1923
1925
1927
1929
1931
1933
1935
1937
1939
1941
1943
1945
1947
1949
1951
1952

TABLE 32

**Number and Percentage of Children Immunised at 31st December, 1952**

| | 0–4 years | 5–14 years | Total |
|---|---|---|---|
| Child Population ... ... | 8,700 | 16,900 | 25,600 |
| Children Immunised ... ... | 5,508 | 12,001 | 17,509 |
| Percentage ... ... ... | 63.31 | 71.01 | 68.39 |

**Analysis of the above Table**

| Year of Birth | 1938-1942 | 1943-1947 | 1948 | 1949 | 1950 | 1951 | 1952 | Total |
|---|---|---|---|---|---|---|---|---|
| Number of Children Immunised | 5,691 | 6,310 | 1,572 | 1,356 | 1,215 | 1,042 | 323 | 17,509 |

## CHAPTER 8

## AMBULANCE SERVICE

This service was administered under my control in conjunction with the Fire Service, the Chief Fire Officer also holding the appointment of Ambulance Officer.

The information given below has been supplied by the County Ambulance Officer.

"Table 33 gives details of the work performed by the Ambulance Service since July 5th, 1948 :—

TABLE 33

| Year | No. of Cases Carried | | | Mileage | | |
|---|---|---|---|---|---|---|
| | By Ambulance | By Sitting Cars | Total | Ambulance | Sitting Cars | Total |
| 1948/49 | 3,562 | 2,983 | 6,545 | 123,140 | 122,790 | 245,930 |
| 1949/50 | 8,949 | 8,398 | 17,347 | 235,336 | 337,158 | 572,494 |
| 1950/51 | 12,354 | 14,502 | 26,856 | 207,056 | 332,912 | 539,968 |
| 1951/52 | 15,901 | 13,386 | 29,287 | 240,822 | 287,901 | 528,723 |
| 1952/53 | 17,464 | 14,885 | 32,349 | 243,231 | 325,904 | 569,135* |

* The figures for January to March, 1953, are estimated and based on the the figures for the first nine months of the year.

As will be seen from the above statistics the trend is for the number of cases moved to increase substantially each year and it has only been possible to keep the mileage figures below the peak year of 1949/50 by the introduction of economies such as the use of specially designed ambulances capable of moving up to ten sitting patients to clinics and for treatment at hospitals.

All requests for transport, especially long distance and out of county cases, are scrutinised, and those which are not straightforward investigated by officers of the Service. This is done to ensure that such cases actually require ambulance transport, and on several occasions it has resulted in patients being able to go by train.

Following a meeting between the Hospital Management Committee, County Medical Officer, and Officers of the Ambulance Service in December, 1949, an appointments system was introduced in the Hospitals, which permitted greater co-ordination of movement of ambulances and sitting cars by the grouping of appointments for patients from the same districts and reducing waiting time in consequence.

The County Ambulance Officer periodically circulates general practitioners and hospitals pointing out the increase in the number of cases and appealing for economy in the use of ambulances and cars. Notices have also been displayed in hospitals and doctors' surgeries appealing to

patients not to ask for special transport if public transport would suffice.

The major difficulty encountered has been to maintain an efficient emergency service whilst catering for the ever-increasing demand for transport for non-recumbent cases visiting hospitals and clinics for treatment and recommendations for the introduction of a wireless system in ambulances have been submitted to the Council for consideration. Added to this is the problem of numerous patients requiring specialist treatment having to be conveyed to such distant centres as Manchester and Liverpool.

The scale of equipment to be carried in ambulances as recommended in Welsh Board of Health Circular No. 51/1950 has been maintained as far as possible.

Flagrant abuses of the service are now rarely observed."

TABLE 34

| Service | Number of vehicles at 31st December | Total number of journeys | Total number of patients carried | Accident and other emergency journeys included in Col. 3 | Total Mileage | Whole time staff on 31st December |
|---|---|---|---|---|---|---|
| Directly Provided : | | | | | | |
| Ambulances ... ... | 18 | 8,173 | 17,384 | 1,692 | 222,013 | 16 |
| Cars ... ... ... | — | — | — | — | — | — |
| Agency Service : | | | | | | |
| Ambulances ... ... | — | — | — | — | — | — |
| Cars ... ... ... | — | — | — | — | — | — |
| Supplementary Service : | | | | | | |
| Ambulances ... ... | — | — | — | — | — | — |
| Cars ... ... ... | 120 | 7,029 | 14,896 | — | 321,316 | — |

TABLE 35

**CASES CONVEYED BY AMBULANCES**

**(January to December (inclusive), 1952)**

| Station | Emergency Cases | General Removal | Infectious Diseases | Sitting Cases | Journeys | | Mileage |
|---|---|---|---|---|---|---|---|
| | | | | | Day | Night | |
| Llandudno ... ... | 435 | 1,031 | — | 2,862 | 1,814 | 348 | 29,471 |
| Pwllheli ... ... | 255 | 395 | — | 1,781 | 730 | 170 | 68,025 |
| Bangor ... ... | 326 | 1,227 | 3 | 2,177 | 1,904 | 205 | 34,252 |
| Caernarvon ... ... | 249 | 407 | 9 | 1,851 | 807 | 173 | 29,873 |
| Bethesda ... ... | 108 | 373 | 1 | 487 | 379 | 85 | 11,492 |
| Penmaenmawr ... | 70 | 83 | — | 18 | 83 | 44 | 4,513 |
| Penygroes ... ... | 75 | 249 | 27 | 752 | 313 | 56 | 19,303 |
| Dolgarrog ... ... | 16 | 94 | — | 58 | 61 | 31 | 4,355 |
| Llanfairfechan ... | 40 | 53 | 1 | 62 | 63 | 22 | 2,350 |
| Trevor ... ... | — | 24 | — | 12 | 20 | — | 1,443 |
| Deudraeth ... ... | — | 2 | — | — | 2 | — | 90 |
| Conway ... ... | 109 | 335 | — | 1,187 | 685 | 58 | 14,968 |
| Galltysil ... ... | 3 | 7 | 33 | — | 35 | 3 | 837 |
| Groesynyd ... ... | 6 | 24 | 62 | — | 74 | 6 | 951 |
| Mona (Caernarvon) ... | — | 4 | — | — | 2 | — | 90 |
| Totals ... | 1,692 | 4,308 | 136 | 11,248 | 6,972 | 1,201 | 222,013 |

CHAPTER 9

## PREVENTION OF ILLNESS, CARE AND AFTER-CARE

The services provided for the prevention of illness and the care and after-care of sick or mentally defective persons are administered through the Prevention of Illness, Care and After-care Sub-Committee.

### Tuberculosis

The Council have a comprehensive scheme for the care and after-care of persons suffering from Tuberculosis and the services provided include :

(*a*) Skilled nursing for patients in their own homes.
(*b*) Assistance to obtain extra nourishment, suitable clothing, bed and/or bedding.
(*c*) Temporary care or protection for children where the mother is the person affected.
(*d*) Assistance to patients capable of being employed in obtaining suitable employment.
(*e*) Assistance in finding more suitable housing accommodation for patients living in unsuitable surroundings or in overcrowded houses.
(*f*) Arranging for temporary accommodation or homes for children where residence in their own homes is considered undesirable from the point of view of infection.
(*g*) Open-air shelters and bedding in suitable cases and assisting in finding suitable sites for their erection.
(*h*) Home Helps.
(*i*) B.C.G. Vaccination.

Nine open-air shelters were loaned to patients in various parts of the county and proved to be of considerable value in the semi-isolation of patients from the remainder of their families, and in relieving overcrowding in their homes. Patients were given advice and guidance so that they could derive the fullest benefit from the shelters.

The close co-operation between the Council's Welfare and Rehabilitation Officer and the various public bodies in the county has proved of inestimable value to patients throughout the county, and the work of this officer has been greatly appreciated by patients who have benefited from the advice she has given them, or who have been assisted to obtain suitable employment or some other form of help. Owing to the necessity for prolonged treatment of tuberculous patients, financial worry and depression are two problems which the Welfare and Rehabilitation Officer meets continually. Apart from obtaining financial assistance for patients from statutory and voluntary bodies, the Officer has been able to assist some patients by introducing occupational therapy and assisting them to sell their products.

Further extension of occupational therapy would be most beneficial to many patients if staff were made available.

The services provided by the County Council for the prevention, care and after-care of tuberculous patients are administered in close

co-operation with those of the Regional Hospital Board for diagnosis and treatment.

Arrangements made many years ago for the examination of contacts to notified cases of tuberculosis have been continued. Immediately notifications of tuberculosis are received in my Department, the Health Visitors for the areas are asked to visit the homes and to submit full details of all contacts to me. These contacts are then invited to attend at special weekly clinics held by the Chest Physician in various parts of the county, and reports of the examinations are recorded in my Department. Contacts who fail to attend for examination when invited are visited by the Health Visitors and persuaded to attend at later clinics.

A personal letter is sent by me to parents who do not attend after the Health Visitor's second visit. I am still disappointed at the response of some families to the offer of examination. We fail to attract all contacts, and the outlook of all those concerned with tuberculosis requires revision. I am convinced that the enthusiastic and complete Scandinavian practice of control and eradication would, if adopted in this country, produce equally remarkable results. But one fundamental essential is lacking—a sufficient number of Sanatorium beds.

Table 36 on page 54 gives particulars of " contacts " who were examined at these clinics in 1952, with the results of the examinations.

There is full exchange of information concerning patients and their families between the Chest Physician and my Department and services provided by the County Council are frequently made available to patients on the recommendation of the Chest Physician. The Welfare and Rehabilitation Officer of the County Council maintains close liaison with the Chest Clinics.

I consider that the Mass Radiography Units are not being adequately used and only a very small proportion of the general public are examined in each area visited. The effort and expense involved in Caernarvonshire and throughout the Region is not justified by the results obtained. In Denmark and Sweden it is usual for an average of more than 90% of the general population to seek examination by the Unit. Our combined propaganda methods should be revised in conjunction with General Practitioners.

One instance of a local improvement in attendances may be cited. Because of the low attendances in areas visited by the Mass Radiography Unit in previous years, I sent a personal letter to each household in areas to be visited by the Unit in 1951, with the result that the number of attendances by adults increased from 1924 in 1950 to 6,388 in 1951.

**Vaccination against Tuberculosis** was introduced in this county in July, 1950, and although the object of the scheme is eventually to protect all children, vaccination had to be confined at the outset to infants and children in contact with tuberculous parents and particularly to newly born babies of tuberculous mothers.

Vaccination is performed by the Chest Physician and his staff at clinics held in various parts of the county after the preliminary skin tests have been done by Assistant Medical Officers of the County Council.

Post vaccination skin tests are also performed by the Assistant Medical Officers. I recommended the Hospital Management Committee to accommodate babies at the Minffordd Hospital, Bangor, while they are undergoing B.C.G. vaccination and the arrangement is quite satisfactory.

Since the commencement of the scheme, 264 children had been vaccinated by the end of 1952, and a summary of them is given in Table 37 on page 55.

## Table 36

| No. Referred | | | | | | | Result of X-Ray Examination | | | | | | | | | | | | | | | | Failed to Attend | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Pulmonary Tuberculosis | | | | | | | | | | | | | | | | | | | | | | |
| Age Period | | | | | | | Positive | | | | | | For Observation | | | | | | Negative | | | | | | Age | | | | | |
| —5 | | 5—16 | | Adult | | Total | —5 | | 5—16 | | Adult | | —5 | | 5—16 | | Adult | | —5 | | 5—16 | | Adult | | —5 | | 5—16 | | Adult | | Total |
| M. | F. | M. | F. | M. | F. | | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | |
| 52 | 54 | 98 | 115 | 113 | 162 | 594 | 1 | 2 | — | — | 1 | 2 | — | — | 2 | 4 | 2 | 1 | 41 | 42 | 75 | 92 | 45 | 84 | 10 | 10 | 21 | 19 | 65 | 75 | 200 |

TABLE 37

| Year | Preliminary Skin Test | | Children vaccinated with B.C.G. | | | | | | Reaction after Vaccination | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Age Periods | | | | | | | |
| | + Reaction | — | —1 | 1—5 | 5—10 | 10–15 | 15–20 | Total | Positive | Negative |
| ... ... ... | 10 | 36 | 13 | 10 | 6 | 7 | — | 36 | 36 | — |
| ... ... ... | 41 | 116 | 18 | 35 | 35 | 26 | 2 | 116 | 114* | 1† |
| ... ... ... | 22 | 147 | 26 | 61 | 34 | 22 | 4 | 147 | 139‡ | — |
| Totals ... ... | 73 | 299 | 57 | 106 | 75 | 55 | 6 | 299 | 289 | 1 |

child left the county before an examination could be made to ascertain the reaction.

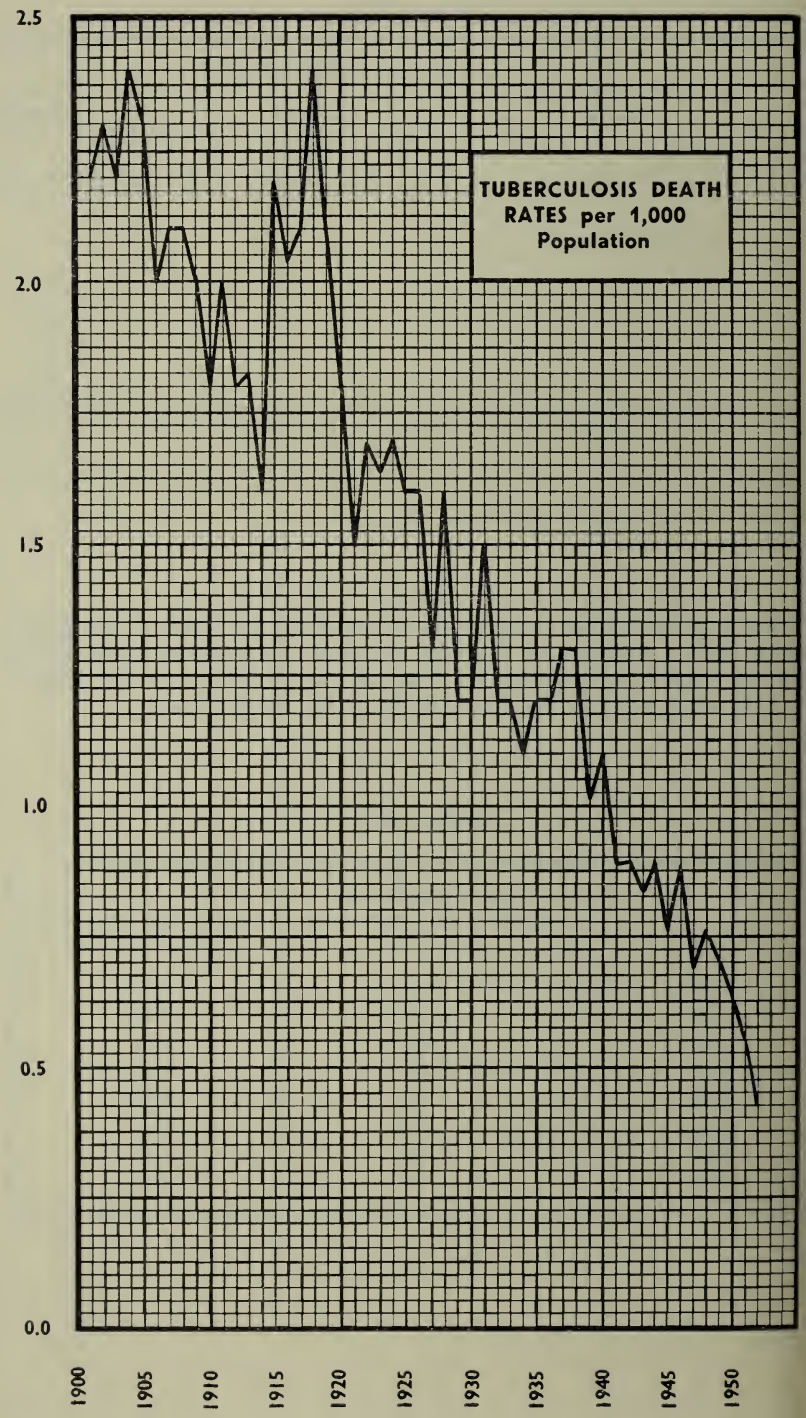
d had negative reaction after first Post Vaccination Test and was given a second application but the parents refused further examination.

t children failed to attend for post-vaccination examination.

There were 49 deaths from Tuberculosis (0.40 per 1,000 of the population) in 1952. A glance at Table 38 will show the decrease in the death rate from Tuberculosis during the last ten years. The rate for 1952 is the lowest ever recorded in the history of the Department.

TABLE 38

| Year | No. of Registered Deaths from Tuberculosis (All forms) | Death Rate per 1,000 of the Population |
|---|---|---|
| 1943 | 111 | 0.84 |
| 1944 | 113 | 0.89 |
| 1945 | 94 | 0.77 |
| 1946 | 108 | 0.88 |
| 1947 | 85 | 0.69 |
| 1948 | 95 | 0.76 |
| 1949 | 88 | 0.71 |
| 1950 | 79 | 0.64 |
| 1951 | 68 | 0.55 |
| 1952 | 49 | 0.40 |


TUBERCULOSIS DEATH RATES per 1,000 Population
2.5
2.0
1.5
1.0
0.5
0.0
1900
1905
1910
1915
1920
1925
1930
1935
1940
1945
1950

## Table 39

**Summary of Formal Notifications of Tuberculosis received during 1952**

| | | Age Periods | | | | | | | | | | | | Total all Ages |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0— | 1— | 2— | 5— | 10— | 15— | 20— | 25— | 35— | 45— | 55— | 65— | 75— | |
| Pulmonary : | Males ... | — | 2 | 4 | 8 | 6 | 9 | 4 | 13 | 16 | 17 | 17 | 4 | 2 | 102 |
| | Females ... | — | — | 5 | 8 | 3 | 8 | 15 | 7 | 6 | 3 | 4 | 1 | 1 | 61 |
| Non-Pulmonary : | Males ... | — | — | 2 | 2 | 1 | 1 | — | — | 2 | — | — | — | — | 8 |
| | Females ... | — | 1 | 1 | 4 | 2 | 3 | 2 | 3 | 1 | — | 2 | 1 | — | 20 |

## Table 39A

**New Cases of Tuberculosis coming to the knowledge of the Medical Officer of Health during 1952 otherwise than by Formal Notification**

| | | Age Periods | | | | | | | | | | | | Total all Ages |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0— | 1— | 2— | 5— | 10— | 15— | 20— | 25— | 35— | 45— | 55— | 65— | 75— | |
| Pulmonary : | Males ... | — | — | — | — | — | — | — | — | — | 2 | 4 | 5 | 1 | 12 |
| | Females ... | — | — | — | — | — | — | — | — | 1 | — | — | — | — | 1 |
| Non-Pulmonary : | Males ... | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| | Females ... | — | — | — | — | — | — | — | — | 1 | — | — | — | — | 1 |

## Table 40

**Distribution of Mortality**

| | Age Period | | | | | | Total All Ages |
|---|---|---|---|---|---|---|---|
| | Under 1 | 1– | 5– | 15– | 45– | 65– | |
| Pulmonary : | | | | | | | |
| Males ... ... ... | — | — | — | 4 | 21 | 11 | 36 |
| Females ... ... ... | — | 1 | — | 6 | 2 | — | 9 |
| Non-Pulmonary : | | | | | | | |
| Males ... ... ... | — | — | — | — | — | — | — |
| Females ... ... ... | — | 1 | — | 3 | — | — | 4 |
| Totals ... ... | — | 2 | — | 13 | 23 | 11 | 49 |

## CANCER

The Death Rate for Cancer has increased from 1.2 per 1,000 of the population in 1902 to 2.84 per 1,000 of the population in 1952.

Though this apparent increased incidence of the disease is most disturbing, it is not as alarming as is at first indicated, because increased knowledge of the disease has undoubtedly resulted in more accurate diagnosis in recent years. The fact remains, however, that the disease is causing considerable concern throughout the country and 349 deaths (2.849 per 1,000 of the population) occurred in Caernarvonshire during 1952. Details of the age and sex distribution of the deaths and the areas in which they occurred are given in these Tables.

TABLE 41

| Urban | | Rural | |
|---|---|---|---|
| Bangor ... ... | 45 | Nant Conway ... | 13 |
| Bethesda... ... | 11 | Gwyrfai ... ... | 63 |
| Betwsycoed ... | 2 | Lleyn ... ... | 52 |
| Caernarvon ... | 24 | Ogwen ... ... | 10 |
| Conway ... ... | 27 | | |
| Criccieth ... | 3 | | |
| Llandudno ... | 54 | | |
| Llanfairfechan ... | 7 | | |
| Penmaenmawr ... | 7 | | |
| Pwllheli ... ... | 17 | | |
| Portmadoc ... | 14 | | |
| Totals ... | 211 | | 138 |

## AGE AND SEX DISTRIBUTION OF DEATHS

TABLE 42

| Sex | All ages | Under 1 | 1– | 5– | 15– | 45– | 65– |
|---|---|---|---|---|---|---|---|
| Males ... | 182 | — | — | — | 7 | 74 | 101 |
| Females ... | 167 | — | — | — | 7 | 52 | 108 |
| Totals ... | 349 | — | — | — | 14 | 126 | 209 |

## DEATHS FROM CANCER SINCE 1940

TABLE 43

| Year | Number of Deaths | Death Rate per 1,000 of the Population |
|---|---|---|
| 1940 | 273 | 2.1 |
| 1941 | 276 | 1.9 |
| 1942 | 303 | 2.2 |
| 1943 | 281 | 2.1 |
| 1944 | 328 | 2.5 |
| 1945 | 306 | 2.51 |
| 1946 | 315 | 2.57 |
| 1947 | 285 | 2.32 |
| 1948 | 304 | 2.43 |
| 1949 | 348 | 2.82 |
| 1950 | 297 | 2.40 |
| 1951 | 317 | 2.57 |
| 1952 | 349 | 2.84 |

## OTHER ILLNESSES

Some of the services provided for persons suffering from tuberculosis are also available for patients suffering from other types of diseases. Consultants connected with the various hospitals in the county have been invited to send to me any relevant medical information about any patients who could derive benefit from the services of the Welfare and Rehabilitation Officer or from any of the other services provided by the County Council. Very few cases are so referred, but the officer is fully occupied with them.

The services rendered by the Welfare and Rehabilitation Officer, District Nurses, Health Visitors and Home Helps is often supplemented by the issue on loan of articles of nursing equipment for the temporary use of patients.

**Convalescence** is provided at suitable homes for persons who have been discharged from hospitals or have recovered from illness at home, and who require a further period of recuperation. The Council accepted financial responsibility for the maintenance of three persons at these homes during 1952.

I have received this report from the Welfare and Rehabilitation Officer on the work she performed during the year :—

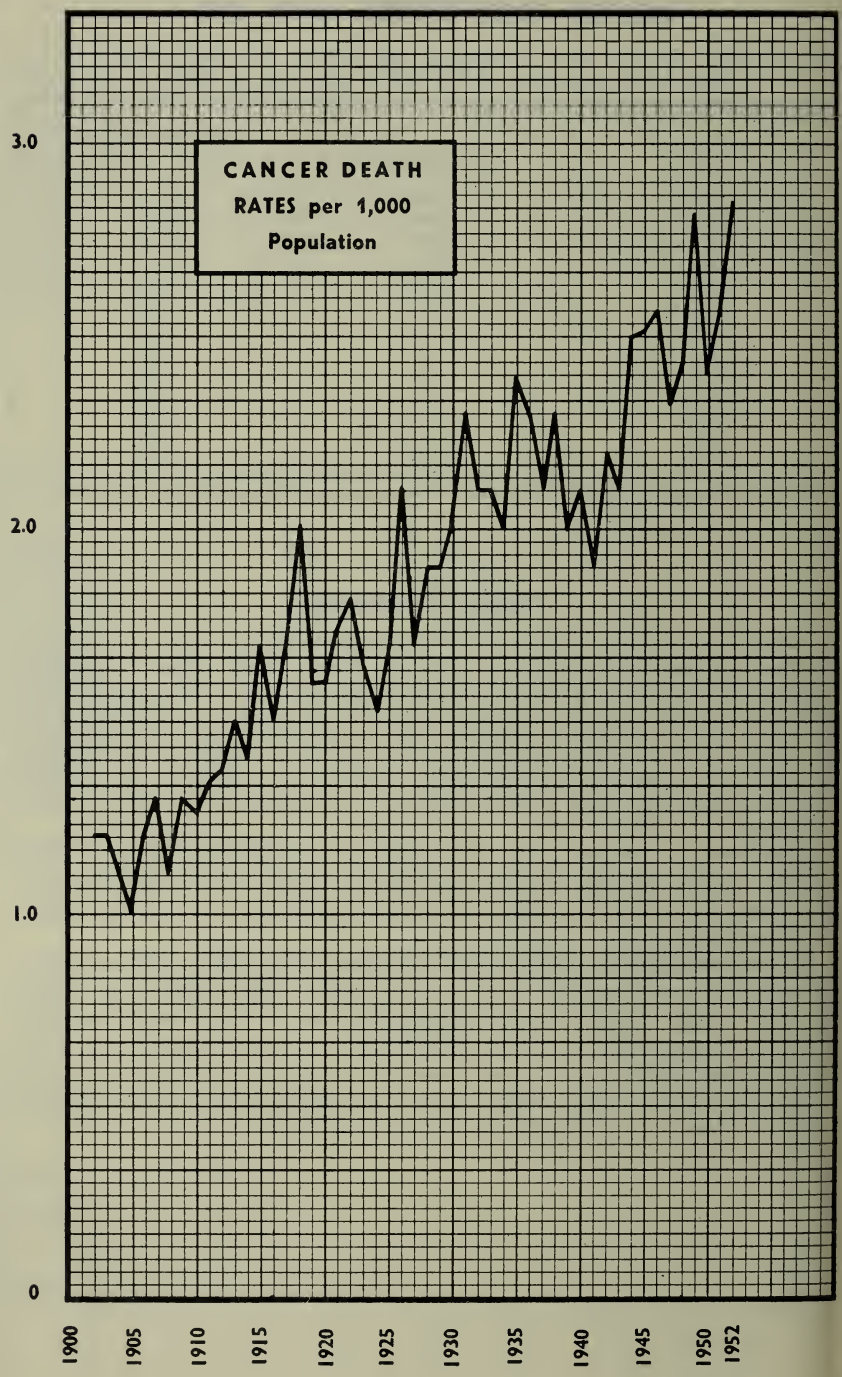

CANCER DEATH
RATES per 1,000
Population
3.0
2.0
1.0
0
1900
1905
1910
1915
1920
1925
1930
1935
1940
1945
1950
1952

TABLE 44

## ANALYSIS OF WORK PERFORMED

| | Tuber-culosis | Diabe-tic | Ortho-pædic | Car-diac | Respi-ratory | Others | Total |
|---|---|---|---|---|---|---|---|
| No. of visits to New Cases ... ... | 51 | 1 | 20 | 13 | 9 | 54 | 148 |
| No. of visits to Old Cases ... ... | 239 | 3 | 93 | 12 | 19 | 116 | 482 |
| No. of visits to or contacts with : | | | | | | | |
| Ministry of Labour ... ... | 51 | — | 9 | — | 1 | 17 | 78 |
| National Assistance Board ... | 53 | — | 2 | — | 1 | 15 | 71 |
| Housing Authorities ... ... | — | — | — | 1 | — | 1 | 2 |
| Red Cross and St. John Societies | 51 | — | 2 | — | — | 23 | 76 |
| Others ... ... ... ... | 56 | — | 37 | — | 1 | 53 | 147 |
| TOTALS ... ... ... | 501 | 4 | 163 | 26 | 31 | 279 | 1004 |

This year the major part of the work has again been among the tuberculous patients who, by the very nature of their illness, have great difficulties and changes in their mode of life to face—changes which affect not only themselves but the whole of their family

Financial problems are the most numerous, and these often occur where the patient is in receipt of full statutory allowances ; he finds himself unable to keep up weekly payments on heavy commitments undertaken before the onset of illness.

One patient, who became ill shortly after his marriage and had undertaken a hire purchase agreement, attempted to continue payments on this by economising on food and milk. A voluntary Society was approached and was able to make a grant so that he is now able to spend his full allowance on food and necessary current expenditure.

The treatment of tuberculosis is often prolonged, and the enforced inactivity so irksome that patients frequently become depressed and moody. To avoid this they are encouraged to undertake some form of suitable handwork. The expense of materials has hitherto been prohibitive for those managing on the statutory allowances and not eligible for help from the British Red Cross Society, but this year many necessitous cases have been helped in this way by the Care Sub-Committee.

The finding of suitable work for the tuberculous continues to be a serious problem in the county, where light work is generally scarce. Work in this direction is undertaken in close co-operation with the Disablement Resettlement Officer of the Ministry of Labour, to whom many cases are referred.

A grant was obtained from the Ministry of Labour towards the provision of tools and a workroom for a patient who is an artist and stone chipper. He has been able to exhibit some of his work at local exhibitions, and is becoming increasingly known, so that it is hoped that he will soon be entirely independent.

It has been possible to obtain light work on the steamers operating

around the North Wales coasts during the summer months for one young man, who is unable for the time being to return to work on deep sea going vessels and who was unwilling to consider any other form of employment.

During the year a considerable amount of work has been undertaken among elderly people receiving treatment in the Chronic Sick Ward at the Caernarvon and Anglesey General Hospital, Bangor. Many of these patients have been living alone, struggling to care for themselves and their homes and yet becoming increasingly infirm. Following treatment, many of them are able to return home if some help with everyday duties such as shopping and the carrying of coal and water, is given.

In this way, one old lady crippled with osteoarthritis and yet able to move about the house slowly, has been helped by a member of a local voluntary Society contacted by me.

Many general cases were assisted. One young girl, crippled with rheumatoid arthritis, living in a small isolated cottage, has been provided with a wireless set on loan from The Wireless for the Bedridden Society. This has given her much enjoyment as she is able to do little with her hands.

A young mother, so debilitated by the continual worry of caring for her three small children that she began to neglect her home, was sent to a Convalescent Home with her youngest child. Since her return she has made a definite effort to improve her standards in the home.

Throughout the year, close co-operation has been maintained with all authorities concerned, both statutory and voluntary, so that the needs of patients may be met in the best possible way."

**Venereal Diseases**

Close co-operation has been maintained with the Medical Officer of the Venereal Disease Clinics to ensure that all persons suffering from venereal disease seek treatment as early as possible, and persons who failed to complete treatment were persuaded to resume treatment. Enquiries were constantly made concerning persons who had been exposed to infection and persuasive methods adopted to secure their attendance at the Clinics for examination.

In some instances it was found that public transport facilities in certain parts of the county were so poor that patients were discouraged from attending the clinics because they had to be away from their homes for most of the day. These patients, particularly mothers with young babies, were provided with special transport so that they could receive treatment.

At my request the Consultant established in 1949 a clinic for mothers and children in the County Hospital, because I felt it undesirable for them to attend the regular Venereal Diseases Clinic in Bangor. I am glad to report that this Clinic has been very successful. It is gratifying to

report also that the Consultant is directly responsible for the treatment of all Wasserman positive mothers and children admitted to the Hospital. Congenital syphilis can eventually be almost entirely eradicated by the adoption of such methods.

Particulars of Caernarvonshire cases and the results of treatment during 1952 are given in these tables :

TABLE 45

| Number of Specimens | Microscopical | | Cultural | Serum | | Cerebro Spinal Fluid | Others for diagnosis of V.D. |
|---|---|---|---|---|---|---|---|
| | For Syphilis | For Gonorrhœa | | For Syphilis | For Gonorrhœa | | |
| 1. Examined at and by the Medical Officer at the Treatment Centre | — | — | — | — | — | — | — |
| 2. From patients attending at the Treatment Centres for examination to an approved laboratory ... ... ... | 2 | 68 | 68 | 409 | 85 | 19 | 39 |

TABLE 46

| Number of Cases | Syphilis | | Gonorrhoea | | Other | | Totals | | |
|---|---|---|---|---|---|---|---|---|---|
| | M. | F. | M. | F. | M. | F. | M. | F. | Total |
| 1 Under treatment or observation on 1st January ... | 58 | 78 | 5 | — | 22 | 6 | 85 | 84 | 169 |
| 2 Removed from the Register during any previous year which returned during the year under report for treatment or observation of the same infection ... | 3 | 13 | 1 | — | — | — | 4 | 13 | 17 |
| 3 Dealt with for the first time during the year under report (exclusive of cases under item 4) ... ... | 5 | 12 | 11 | 5 | 37 | 16 | 53 | 33 | 86 |
| 4 Dealt with for the first time during the year under report but known to have received treatment at other centres for the same infection ... ... | 5 | 7 | — | — | 1 | 1 | 6 | 8 | 14 |
| Total (Items 1—4) ... ... ... | 71 | 110 | 17 | 5 | 60 | 23 | 148 | 138 | 286 |
| 5 Discharged after completion of treatment and final test of cure or after diagnosis as non-venereal ... | 9 | 13 | 5 | — | 45 | 14 | 59 | 27 | 86 |
| 6 Which ceased to attend after completion of treatment but before final discharge ... ... ... ... | 6 | 8 | 2 | 2 | — | — | 8 | 10 | 18 |
| 7 Which ceased to attend before completion of treatment or who died ... ... ... ... ... | 7 | 9 | — | — | — | — | 7 | 9 | 16 |
| 8 Transferred to other centres or to institutions or to care of private practitioners ... ... ... | 3 | 11 | 1 | — | 1 | 1 | 5 | 12 | 17 |
| 9 Remaining under treatment or observation on December 31st ... ... ... ... ... | 46 | 69 | 9 | 3 | 14 | 8 | 69 | 80 | 149 |
| Total (Items 5—9) ... ... ... ... | 71 | 110 | 17 | 5 | 60 | 23 | 148 | 138 | 286 |
| 10 (Included in Item 6 which failed to complete one course of treatment ... ... ... ... ... | — | 2 | — | — | — | — | — | 2 | 2 |
| 11 Number of attendances for individual attendance of medical officers and for intermediate treatment | 752 | 586 | 76 | 11 | 126 | 51 | 954 | 648 | 1602 |

TABLE 47

## Summary of Caernarvonshire Cases (with Results) Treated during 1940-1952

| Year | Number Attended | | | | | | Number Treated | | | | | | Left Off Treatment | | | | | | Transferred to Other Centres, etc. | | | | | | Presumed Cured | | | | | | Still Under Treatment | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Syphilis | | Gon. | | Other | | Syphilis | | Gon. | | Other | | Syphilis | | Gon. | | Other | | Syphilis | | Gon. | | Other | | Syphilis | | Gon. | | Other | | Syphilis | | Gon. | | Other | |
| | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. |
| 1940 ... | 16 | 15 | 20 | 9 | — | — | 16 | 15 | 20 | 9 | — | — | 1 | — | 2 | — | — | — | — | — | — | — | — | — | 5 | 5 | 13 | 9 | — | — | 10 | 10 | 5 | — | — | — |
| 1941 ... | 20 | 17 | 9 | 4 | 13 | 11 | 20 | 17 | 9 | 4 | 13 | 11 | 5 | 5 | 3 | 1 | — | — | — | — | — | — | — | — | — | 1 | 6 | — | 13 | 11 | 15 | 11 | 2 | 3 | — | — |
| 1942 ... | 25 | 17 | 16 | 9 | 20 | 12 | 25 | 17 | 16 | 9 | 20 | 12 | 2 | 3 | 4 | 1 | 20 | 12 | 5 | — | 1 | — | — | — | 1 | — | 9 | 2 | 20 | 12 | 17 | 4 | 2 | 6 | — | — |
| 1943 ... | 40 | 25 | 21 | 6 | 13 | 15 | 40 | 25 | 21 | 6 | 13 | 15 | 2 | 4 | 4 | — | — | — | 5 | — | — | — | — | — | 3 | — | 9 | 2 | 13 | 15 | 26 | 21 | 8 | 4 | — | — |
| 1944 ... | 52 | 38 | 21 | 14 | 9 | 28 | 52 | 38 | 21 | 14 | 9 | 28 | 19 | 12 | 3 | 2 | — | — | 10 | 5 | 3 | 1 | — | — | 3 | 1 | 11 | 3 | 7 | 28 | 20 | 20 | 4 | 8 | 2 | — |
| 1945 ... | 25 | 38 | 22 | 14 | 19 | 36 | 25 | 38 | 22 | 14 | 19 | 36 | 3 | 11 | — | 3 | — | — | — | 2 | — | — | — | — | 2 | 1 | 5 | 4 | 12 | 20 | 20 | 24 | 14 | 10 | 7 | 16 |
| 1946 ... | 50 | 45 | 40 | 19 | 30 | 19 | 50 | 45 | 40 | 19 | 30 | 19 | 4 | 6 | 17 | 5 | — | — | 8 | 5 | — | — | — | — | 6 | 4 | 15 | 6 | 26 | 15 | 32 | 30 | 8 | 8 | 4 | 4 |
| 1947 ... | 87 | 92 | 42 | 21 | 20 | 22 | 87 | 92 | 42 | 21 | 20 | 22 | 15 | 4 | 15 | 7 | 3 | — | 12 | 4 | 1 | — | — | — | 3 | — | 13 | 7 | 12 | 22 | 57 | 84 | 13 | 7 | 5 | — |
| 1948 ... | 111 | 108 | 32 | 10 | 61 | 4 | 111 | 108 | 32 | 10 | 61 | 4 | 10 | 31 | 3 | 6 | 4 | 2 | 22 | 13 | 1 | — | 1 | — | 16 | 1 | 20 | 3 | 44 | — | 63 | 61 | 8 | 1 | 12 | 2 |
| 1949 ... | 97 | 109 | 29 | 6 | 65 | 35 | 97 | 109 | 29 | 6 | 65 | 35 | 9 | 6 | 2 | 1 | — | — | 8 | 1 | 2 | — | — | — | 9 | 13 | 15 | 2 | 56 | 29 | 67 | 86 | 10 | 3 | 9 | 6 |
| 1950 ... | 93 | 119 | 28 | 6 | 79 | 40 | 93 | 119 | 28 | 6 | 79 | 40 | 5 | 23 | 3 | — | — | — | 3 | 7 | 6 | — | 2 | 1 | 16 | 9 | 8 | 3 | 58 | 33 | 66 | 80 | 11 | 3 | 19 | 6 |
| 1951 ... | 94 | 111 | 19 | 4 | 58 | 29 | 94 | 111 | 19 | 4 | 58 | 29 | 15 | 22 | 2 | — | — | — | 7 | 3 | 2 | — | — | — | 14 | 8 | 10 | 4 | 36 | 23 | 58 | 78 | 5 | — | 22 | 6 |
| 1952 ... | 71 | 110 | 17 | 5 | 60 | 23 | 71 | 110 | 17 | 5 | 60 | 23 | 6 | 8 | 3 | 3 | — | — | 3 | 11 | 1 | — | 1 | 1 | 9 | 13 | 5 | — | 45 | 14 | 46 | 69 | 9 | 3 | 14 | 8 |

## Bacteriological and Pathological Specimens

Bacteriological and pathological specimens were sent for examination to the Public Health Laboratory at Conway. The number of specimens submitted were :

TABLE 48

| | |
|---|---|
| Faeces (for the presence of food poisoning organisms)... ... | 56 |
| Nose and Throat Swabs (for the presence of Hæmolytic Streptococci) ... ... ... ... ... ... ... | 113 |
| Nose and Throat Swabs (for Diphtheria Bacilli) ... ... | 41 |
| Ear Swabs ... ... ... ... ... ... ... ... | — |
| Nasal Swabs (for Meningococci) ... ... ... ... ... | — |
| Food and Containers (for the presence of food poisoning organisms) ... ... ... ... ... ... ... | — |
| Urine ... ... ... ... ... ... ... ... | 1 |
| Vaginal Swab ... ... ... ... ... ... ... | 1 |

## Health Education

A great deal of time, energy and money could be expended on Health Education, but its success is inevitably associated with the manner in which it is accepted and appreciated by members of the public. It has, therefore, to be presented to the public in a form which is attractive and arresting, at a time suitable to the public, and in places virtually chosen by the public. Health education must be taken to the public and not the public to health education.

The Medical, Health Visiting and Nursing Staff of the Council have, therefore, been charged with the responsibility of educating and re-educating families residing in their areas in a way in which it will be best accepted. Advice given by the doctor to a mother in the privacy of his consulting room at a school or clinic, a hint from the midwife to a mother attending to her infant on her own hearth, personal advice by the Health Visitor given at the opportune moment—all will create a much better and more permanent impression than any advice given at a public lecture or meeting, if indeed one could persuade the public to attend such meeting.

Health Education by personal contact in this way has, of course, been supplemented by other means of educating the public during the last four years. Health Exhibitions on a very comprehensive scale have been held in various centres in the county depicting the services provided under the National Health Service Act, and emphasising the essential points in the maintenance of good health.

The staff of the Health Department have given a series of lectures and demonstrations to School Canteen Staff. Constant contact is maintained with the Schools Meals Organiser and advice is frequently sought and given.

One rather unusual direction in which the Department has been active in the Health Education and Prevention of Illness sphere is the formation of the Caernarvonshire Clean Food Association on my recom-

mendation in 1948. Although the progress of the Association is slow, it is, I believe, steadily consolidating and extending its position.

Posters and leaflets have been used extensively to draw the attention of the public to the part which they should play in maintaining their own and their children's health. Display sets loaned by the Central Council for Health Education have been shown at Infant Welfare Clinics and talks and displays given during Infant Welfare Clinic Sessions.

The duties of the County Health Officer constantly bring him in contact with persons responsible for the production and selling of foodstuffs and for the preparation of food for sale in cafes and restaurants; milk producers, pasteurising establishments and milk retailers. The advice and guidance which he has given has been of considerable value in the prevention of infection and in the promotion of hygienic handling of food and milk supplies.

Home Safety Committees have been formed in Bangor and Caernarvon in conjunction with the Royal Society for the Prevention of Accidents in order to foster and encourage interest in the Prevention of Accidents in the Home. The Committees include members of the various voluntary organisations in the areas and members of the Medical and Nursing Staff of the Health Department.

A panel of speakers has been enlisted to address public meetings and the co-operation of the Chief Fire Officer and the Road Safety Organiser have been secured to assist the Committees. Lectures and demonstrations have been given at Infant Welfare Clinic Sessions and exhibits displayed in various clinic premises, in addition to the distribution of posters and leaflets. An interesting exhibit was displayed at the Royal Welsh Agricultural Show held in Caernarvon in July, 1952, and smaller exhibits have been displayed in shop windows in two areas. Films have been shown at meetings of the Committees and are to be displayed at public meetings during this year.

CHAPTER 10

## HOME HELP SERVICE

The County Superintendent of Midwives also acts as Home Help Organiser. District Nurse/Midwives are responsible for local supervision, and submit reports to the Superintendent on the home and other circumstances of applicants for the service of a Domestic Help, in addition to making regular visits to homes where helps are working. Twenty-six full-time and eleven part-time Home Helps were employed at the end of 1952.

At the inception of the service it was necessary to maintain firm control over the demands for it. Many persons regarded it as a domestic service agency.

In several instances daughters gave up their employment in order to look after sick parents and applied for allowances as Home Helps ; other applicants expected to have the service of some relative or acquaintance whom they specified in their applications. These, and other difficulties have, however, been overcome and appreciations of the service, written and verbal, have been received from numerous families who have benefited from it.

Home helpers are carefully selected. It is easier to obtain good full-time than part-time helpers. Travelling time is, of course, a complication and the organising of the service involved a great deal of the time and thought of the Superintendent.

An analysis of the work performed in 1952 is given in this Table.

TABLE 49

| Type of Case | No of cases on register on 1.1.52 | No. of new cases during the year | No. of cases on register on 31.12.52 |
|---|---|---|---|
| Maternity ... | 3 | 66 | 3 |
| Tuberculosis ... | 1 | 14 | 2 |
| Blind ... ... | — | — | — |
| General ... ... | 16 | 153 | 44 |
| Totals ... | 20 | 233 | 49 |

## CHAPTER 11

## MENTAL HEALTH SERVICES

### Administration

(*a*) Meetings of the Mental Health Sub-Committee are held quarterly. Six members have been co-opted to serve with twenty-five members of the County Council.

(*b*) The staff employed includes the County Medical Officer of Health, his Deputy, four Assistant Medical Officers, and five part-time duly Authorised Officers. It has been impossible to recruit the staff of Mental Health Workers envisaged in the Authority's proposals.

(*c*) There is close co-ordination between the Medical Staff of the North Wales Hospital for Mental and Nervous Disorders. Mental defectives on licence are supervised by the Authority's Assistant Medical Officers and Health Visitors.

(*d*) No voluntary associations exist in the county for the care of mental cases or mental defectives.

(*e*) No arrangements have been initiated for the training of Mental Health Workers.

### Work undertaken in the Community

(*a*) No definite service can be provided because staff is not available. If the staff authorised in the Authority's proposals could be obtained, a comprehensive service could be established. I am convinced of the necessity and the advantages of a fully co-ordinated preventive service functioning in close collaboration with the Hospital Service.

Appropriate action and assistance in the early stages of mental illness can prevent the patient becoming worse, and in many cases it has been possible to avoid admission to a Mental Hospital. But two important and essential conditions are necessary —firstly, finding and treating the patient in the earliest stages of the disease, and secondly, employing expert and efficient staff (Psychiatric Social Workers) to deal with the patient in his home and work environment under the direction of the Medical Psychiatrist. All aspects of the patient's environment and circumstances have to be considered and, if necessary, ameliorated or altered. Among the most important matters that need consideration are the patient's work, his relations with his family and the other members of the community, and the proper use of his leisure time. Attention given to these matters consumes much time and energy but produces very satisfactory and lasting results. The conditions which apply to the successful treatment of early mental disease apply also with equal force to success in dealing with patients discharged from hospital. It is now generally recognised that a patient discharged from

a Mental Hospital requires very special care and assistance if he is to resettle easily, effectively and permanently in the community.

(*b*) Particulars of patients with whom duly Authorised Officers were concerned under the Lunacy and Mental Treatments Acts 1890–1930 are give in Table 50

TABLE 50

| | Admitted 1952 | Discharged 1952 |
|---|---|---|
| Certified ... ... ... ... | 55 | 63 |
| Voluntary Patients ... ... | 143 | 137 |

Details concerning the ascertainment of Mental Defectives are given in this table.

Training is not provided for defectives at home nor at Occupation Centres.

TABLE 51

| | During 1952 | | | | Total at 1st January, 1953 | | | |
|---|---|---|---|---|---|---|---|---|
| | Age under 16 | | Age 16 and over | | Age under 16 | | Age 16 and over | |
| | M. | F. | M. | F. | M. | F. | M. | F. |
| 1. CASES REPORTED— | | | | | | | | |
| (*a*) By Local Education Authority: | | | | | | | | |
| (i) While at School or liable to attend School ... ... ... ... | 3 | 6 | — | — | — | — | — | — |
| (ii) On leaving Special Schools ... ... | — | — | — | — | — | — | — | — |
| (iii) On leaving Ordinary Schools ... | — | — | — | — | — | — | — | — |
| (*b*) By Police or Courts ... ... ... | — | — | 2 | — | — | — | — | — |
| (*c*) Other Sources ... ... ... ... | — | — | 8 | 11 | — | — | — | — |
| Totals ... ... ... ... | 3 | 6 | 10 | 11 | — | — | — | — |
| 2. DISPOSAL OF CASES— | | | | | | | | |
| (*a*) Those "Subject to be Dealt with": | | | | | | | | |
| (i) Placed under Statutory Supervision... | 3 | 5 | 9 | 6 | 16 | 14 | 22 | 14 |
| (ii) Placed under Guardianship ... ... | — | 1 | 1 | 2 | 1 | 3 | 9 | 13 |
| (iii) Taken to "Place of Safety" ... | — | — | — | — | — | — | — | 1 |
| (iv) Admitted to Institution ... ... | — | — | — | 3 | 5 | 8 | 50 | 50 |
| (*b*) Not "Subject to be Dealt with": | | | | | | | | |
| (i) Placed under Voluntary Supervision | — | — | — | — | — | — | 43 | 24 |
| (ii) Action unnecessary ... ... ... | — | — | — | — | — | — | — | — |
| Totals ... ... ... ... | 3 | 6 | 10 | 11 | 22 | 25 | 124 | 102 |

CHAPTER 12

## MILK SUPPLIES

I have received this report from my County Health Officer :—

*" To the County Medical Officer of Health.*

Dear Sir,

### Supervision and Licensing of Pasteurising Establishments

During the year I have been concerned with the periodical inspection of the premises and of the apparatus and equipment installed at the four pasteurising establishments licensed by the County Council. I am of the opinion that the performance of a dairy can be influenced greatly by the firm though friendly approach of the inspector, and I have tried to exercise my duties in this manner. I am glad to report that the relationship between the management and staff at these establishments have always been most cordial and co-operation has been excellent.

Subsequent to my visits to these establishments when suggestions were made during inspections, notices were served on the owners involving work of a more costly nature. Steady progress is being made, but with the changing trend of modern dairying, it is work that is never done with any finality. Unfortunately some of these premises were not constructed as dairies and were extremely difficult to adapt for their present purpose. This work of conversion is most costly and ultimately when all is done the premises often assume a piecemeal appearance which falls short of what is desirable. The owners in these instances have spent a large sum of money during the year and it is gratifying to see positive action in the exercise of their responsibility towards the provision of a clean, wholesome supply of milk to the consumer.

Apart from the structural alterations a considerable amount of modern hygienic machinery has been installed in all these premises. Milk more so than any other food is an extremely good vehicle of infection, and what is more, is itself easily infected. It is of vital importance therefore that the hands, in particular of the dairy staff should be kept meticulously clean, especially in those dairies where bottles after being filled with milk are capped by hand. Here the operator has to pick up a cap with his fingers before placing it on the lip of the bottle, and where thousands of bottles are capped daily in this way, the milk side of many caps is touched by the fingers. When this process is done mechanically a sterile roll of capping material is placed in the machine which cuts out the cap and fixes it on the lip of the bottle automatically, thus eliminating the possibility of contamination by the fingers. There are now three pasteurising establishments in the County with automatic capping apparatus, as compared with two a year ago.

The two types of pasteurising plants in use in the county are the " Holder " and the " High Temperature—Short Time." Where the

" Holder " method is employed the milk is heated to a temperature of 145°F.—150°F. for a period of 30 minutes in a special vat, and cooled immediately to a temperature below 50°F., and in the H.T.S.T. method the milk is heated to 161°F. for a period of 15 seconds before being immediately cooled to 50°F. or less. In these two plants there are two combinations of temperature and time to which the milk is submitted in order that the Tuberculosis Bacilli and other pathogens which might be in the raw milk are destroyed. At these combinations of time and temperature the phosphatase enzyme in the milk is also destroyed and samples of milk submitted to the Public Health Laboratory are examined for the presence or absence of this enzyme, the result being indicative of whether the milk has been properly pasteurised.

Samples of milk have also been submitted for the keeping quality test, and empty bottles taken from the dairies were examined at the Public Health Laboratory to test the efficiency of the washing and sterilising plant. I immediately made investigations concerning the two samples which failed the test. The managements of the establishments were most concerned and co-operative, but the cause of the failures was not traced. No subsequent failures were reported.

### Herd Sampling for the Presence of Tubercle Bacilli

During the year samples of milk were taken from all types of herds for biological examination. The bulk of the biological examinations were performed by the Ministry of Agriculture Research Laboratory at Bryn Adda, Bangor, and a few by the Public Health Laboratory, Conway. Guinea pigs were again in short supply and the number of samples submitted were restricted to the availability of these animals for testing purposes. The milk submitted for examination was selected mainly from those herds whose milk was retailed in the raw rather than the pasteurised state. All raw milks both designated and undesignated supplied to schools under the Milk in Schools Scheme were submitted for biological examination during the year and none were reported infected with Tubercle Bacilli. During the year a total of 320 samples were submitted for examination and the presence of tubercle bacilli was reported in two T.T. herds. In accordance with the provisions of Part IV of the Agriculture Act, 1937, particulars of the positive results of the tests were forwarded to the Divisional Inspector of the Ministry of Agriculture and Fisheries, who arranged for the herds to be inspected and the offending cows slaughtered. In both these cases a cow from each herd was already under observation by the Divisional Veterinary Inspector and was subsequently slaughtered under the Tuberculosis Order 1938.

Part VII of the Milk and Dairies Regulations 1949 (Regulations 18, 19 and 20) deals with the action which may be taken in relation to the infection of milk. The Regulations state that the District Medical Officer of Health is the responsible officer for taking the necessary steps to prevent infection through the medium of milk. It will be appreciated that, in

this county where the two District Medical Officers have no appointed Deputies, difficulties might arise owing to the Medical Officer not being available owing, say, to being absent on leave.

### Specified Areas and the Compulsory Use of Special Designation

The responsible officer in this region of the County for surveying an area for " Specification " under the Food and Drugs (Milk Dairies and Artificial Cream) Act, 1950, is the Area Milk Officer, Manchester, whom I interviewed regarding the future Specification of Caernarvonshire. He stated that the area the Ministry had considered was a coastal strip from Prestatyn, Flintshire, to Llanfairfechan, and that he would begin a survey of this area towards the end of 1953.

TABLE 52

### Biological Sampling

| Type of Milk | No of Samples Taken | No. Positive | No. Negative |
|---|---|---|---|
| Tuberculin Tested ... | 51 | 2* | 49 |
| Accredited ... ... | 21 | — | 21 |
| Ungraded ... ... | 243 | — | 243 |
| Pasteurised ... ... | 5 | — | 5 |
| T.T. Pasteruised ... | — | — | — |
| Totals ... | 320 | 2* | 318 |

* Cows traced and slaughtered.

Table 53

## Bacteriological Sampling

| Grade of Milk | Bacteriological Results | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Methylene Blue | | | | | | Phosphatase Test | | | | | |
| | Number Taken | | Number Satisfactory | | Number not Satisfactory | | Number Taken | | Number Satisfactory | | Number not Satisfactory | |
| | P.P. | S. | P.P. | S. | P.P. | S. | P.P. | S. | P.P. | S. | P.P. | S. |
| Tuberculin Tested | — | 70 | — | 62 | — | 8 | — | — | — | — | — | — |
| Accredited ... | — | 11 | — | 9 | — | 2 | — | — | — | — | — | — |
| Ungraded ... | — | 44 | — | 35 | — | 9 | — | — | — | — | — | — |
| Pasteurised ... | 46 | 62 | 46 | 62 | — | — | 46 | 62 | 46 | 60 | — | 2 |
| T.T. Pasteurised | 35 | 13 | 35 | 13 | — | — | 35 | 19 | 35 | 19 | — | — |
| Total ... ... | 81 | 200 | 81 | 181 | — | 19 | 81 | 81 | 81 | 79 | — | 2 |

P.P.—Taken from Pasteurising Plant. S.—Taken at Schools.

Table 54

## Pasteurising Establishments

| | |
|---|---|
| No. of premises on register at the beginning of the year ... ... | 4 |
| No. of Licences granted during the year ... ... ... | — |
| No. of Licences cancelled during the year ... ... ... | — |
| No. of premises on register at the end of the year ... ... | 4 |

Table 55

## Inspection of Plant

| | |
|---|---|
| No. of Plants on register ... ... ... ... ... ... | 4 |
| No. of Inspections during the year ... ... ... ... | 52 |
| No. of Notices served ... ... ... ... ... ... | 2 |
| No. of Notices complied with ... ... ... ... ... | 1 |

G. Richards,
*County Health Officer."*

# CHAPTER 13

## CAERNARVONSHIRE CLEAN FOOD ASSOCIATION

This Association was formed in 1948, for raising the standard of cleanliness and safety in food premises, hotels, restaurants, cafes and other premises.

Applications for membership of the Association are very few and as will be seen from the table below, only four applications have not been granted out of a total of 61. There is always some degree of apathy associated with any new organisation which attempts to improve conditions in any trade or business. But it must be emphasised that the code of practice adopted by the Association is merely the application of existing law and regulations. There is, therefore, no reason why all traders should not qualify for membership if they are providing a clean, safe service for the public.

No elaborate equipment nor expensive premises are necessary for providing clean safe food. The two main essentials are good methods of preparation and storage and, more important than anything else—elementary personal cleanliness.

TABLE 56

| Councils | No. of applications received | Number of Certificates issued | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Hotels | Cafes | Fish and Chip Shops | Butchers | Fish Mongers | Schools | Grocers | Total |
| Bangor M.B. ... | 1 | — | — | — | — | — | 1 | — | 1 |
| Bethesda U.D. ... | 1 | — | — | — | — | — | 1 | — | 1 |
| Betwsycoed U.D. ... | — | — | — | — | — | — | — | — | — |
| Caernarvon M.B. ... | 17 | 3 | 2 | 1 | 3 | 2 | 2 | — | 13 |
| Conway M.B. ... | 1 | — | — | — | — | — | 1 | — | 1 |
| Criccieth U.D. ... | 12 | 2 | 6 | — | 1 | 1 | — | 2 | 12 |
| Gwyrfai R.D. ... | 3 | — | — | — | — | — | 3 | — | 3 |
| Llandudno U.D. ... | 1 | — | — | — | — | — | 1 | — | 1 |
| Llanfairfechan U.D. | — | — | — | — | — | — | — | — | — |
| Lleyn R.D. ... ... | — | — | — | — | — | — | — | — | — |
| Nant Conway R.D. | 15 | 7 | 4 | 1 | — | — | 3 | — | 15 |
| Ogwen R.D. ... | 1 | — | — | — | 1 | — | — | — | 1 |
| Penmaenmawr U.D. | 1 | — | 1 | — | — | — | — | — | 1 |
| Portmadoc U.D. ... | 8 | 2 | 4 | — | 1 | — | — | 1 | 8 |
| Pwllheli M.B. ... | — | — | — | — | — | — | — | — | — |
| Totals ... | 61 | 14 | 17 | 2 | 6 | 3 | 12 | 3 | 57 |

My County Health Officer has prepared this report on the difficulties encountered and the progress made.

*" To the County Medical Officer of Health.*

Dear Sir,

**Report on the Caernarvonshire Clean Food Association**

During the year the response of the traders to the invitation to apply for membership has been disappointing, particularly when one considers that the Association has much to offer to members in the way of professional advice on all aspects of food hygiene. There are few people who appreciate that the Association offers these facilities free of charge and that it serves the dual purpose of improving the conditions under which food is prepared and handled whilst helping the trader to overcome any obstacle with which he might be confronted in attaining these standards, which, after all, he is legally bound to do. Again, traders often spend much money in engaging professional men and builders to reconstruct or build premises without first consulting the Sanitary Inspector, whose advice is free and who is expertly qualified and widely experienced in these matters. This valuable service of the Sanitary Inspector is too seldom sought, possibly because he is also associated with the enforcement of the Public Health Law, although this connection should only influence the recalcitrant members of the trading public.

There are many factors contributing to the somewhat apathetic tendency of the traders towards the Association, but two are in my opinion worthy of consideration. The first is that a trader is reluctant to countenance membership because it would bind him to certain conditions which would involve additional labour and expense. The second reason follows as a corollary to the first in that the terms of the Code of Practice of the Association are often regarded as being too stringent and this has been put to me on several occasions as being the cause of poor support. I have explained that the Code of Practice is in no way meant to substitute or to be complementary to existing laws relating to food hygiene and Infectious Disease, it is in fact a consolidation of the main relative points of the existing law itemised in a practical manner for the quick and easy reference of the trader. Many people to whom I have spoken think that the Code of Practice is some new list of regulations formulated to harass further the shopkeeper who has been inundated with similar literature, particularly in recent years. The fact that these regulations have been in existence for many years was in many cases received with mild trepidation.

I maintain that the Public Health Law is made in the light of what is possible to achieve by its practical application and when from time to time new rules are made, they reflect the progress made, in the preventive field of Public Health. The principal Act as far as food premises are concerned is the Food and Drugs Act, 1938, but it is regrettable that so many food premises of all kinds do not yet satisfy the requirements

laid down in this Act. In 1949 the Minister of Food issued model byelaws for the guidance of Local Authorities in making byelaws, the main purpose of which was to ensure that every person who handles, wraps or delivers any food shall observe cleanliness in regard to himself and his clothing and also to take reasonable measures to protect the food from any form of contamination. Byelaws based on the model have been adopted by ten County Districts in the county, and another one has submitted byelaws to the Minister for approval, leaving four County Districts which have not adopted the byelaws. The Minister of Food has recently stated that new legislation will soon be introduced to amend the Food and Drugs Act, 1938. When this new legislation will come into operation, there will be a great danger that the gap between what is required and what exists might widen still further. It is paramount therefore that all concerned should strive to narrow this gap now, and not wait for the strict enforcement of the law to take place at a later date, when the cost of alterations and repairs to premises might lead to severe hardship for the trader.

Apart from the structural conditions of food premises, there is the hygienic attitude of the food traders to consider, for a good building with excellent equipment satisfying the requirements of the law is wasted without the good hygienic conduct of the management and staff.

The combination of good structural conditions of the premises and wholesome approach by the management and staff is both desirable and essential if the food and drink infections are to be reduced to a minimum.

With regard to the second condition the public and traders alike should possess a knowledge of the causes of food poisoning, personal hygiene and other relative health matters. This field of knowledge is unlimited, and food traders should be encouraged to enlarge upon what knowledge they already possess as well as keeping abreast of new developments. They should be taught to distinguish between what is desirable and what is essential, so that when it becomes a matter of urgency the essential precaution should be taken. I will illustrate what I mean by the example of bread wrapping. Many people are really perturbed when bread is not wrapped, but show a complete indifference to the necessity of giving pasteurised milk to school children. When pathogenic organisms fall on bread no serious consequence is likely to occur, because it is not a suitable medium for the multiplication of such germs. Bread wrapping is desirable but not essential. I do not think there has been an outbreak of food poisoning traced to bread.

During this last winter I have given lectures on food hygiene to traders in Penmaenmawr, Caernarvon and Pwllheli. Subsequent to invitations from the Young Farmers' Clubs at Clynnog and Caernarvon I gave two talks on " Some aspects of clean milk production and distribution." The number of people attending these lectures were satisfactory, but on one or two occasions during very bad weather the attendances were poor.

On the question of stimulus, I have found as a general rule that only something attractive will draw people out of their homes, so that a cer-

tain amount of entertainment has to be brought into an evening's programme to secure more listeners. Food hygiene is not, however, the type of subject that is likely to arouse storms of enthusiasm and it can be understood why it is advisable to make any attempts at food hygiene education as attractive as the subject will allow. In Pwllheli, with the support of the Pwllheli Chamber of Trade and the Pwllheli Borough Council, I organised a "Quiz" in which members of the public were invited to put questions which were answered by a team of speakers. This was well attended and proved both entertaining and educational and perhaps further functions of this kind would prove beneficial.

A great deal of work has been done in School Canteens during the year and much old defective equipment has been replaced with modern appliances. There are several schools I have visited recently with only minor defects which will no doubt be remedied soon when I hope to be able to inform you of a substantial increase in the membership of School Canteens.

TABLE 57

| | |
|---|---|
| No. of premises inspected and interviews with Tradespeople... | 122 |
| No. of applications received during the year ... ... ... | 16 |
| No. of applications granted during the year ... ... ... | 12 |

G. RICHARDS,
*County Health Officer."*

## CHAPTER 14

## FOOD SUPPLIES

This report on the administration of the Food and Drugs Act, 1938, has been submitted by the Chief Sampling Officer, for the year ending 31st March, 1953 :—

" The year 1952-53 created a record in the number of samples taken for analysis. The total number of 822 represents a rate of sampling equal to 6.7 samples per one thousand of the county's population. This rate is infinitely higher than the average for the country, and greatly exceeds the average hitherto attained in Caernarvonshire.

Sampling has covered a wide range of foods, but as usual the great majority consists of milks, of which 682 samples were taken.

It will be noted from Table A that 205 milk samples were submitted to the Public Analyst and 477 tested by the Department. The considerable saving in Analysts' fees reflects credit on the members of my staff who have worked so hard in adapted laboratories. Systematic use has been made of the Hortvet Cryoscope for the purpose of detecting samples of milk adulterated by the addition of water.

A great quantity of milk produced in the County is exported, and generally the raw milk is received at depots or creameries where it is heat treated before being passed on to the consumer. In the interests of this considerable export trade it is essential that a high qualitative standard be maintained. Unfortunately, the standard has deteriorated appreciably during the year under review, when more than 16% of the milk samples were reported to be non-genuine.

The non-genuine milk samples were made up of 21 samples containing added water, 19 samples deficient in Fat and 66 milks below the standard for Solids-not-Fat but containing no added water.

The number of samples adulterated by the addition of water has increased very much by comparison with the numbers certified during the last few years. It is hoped that the substantial fines imposed will act as a deterrent and bring about an improvement in this respect.

The range of deficiencies in milk samples reported to be deficient in fat, extended from 3 to 52%. The highest deficiency was discovered in a sample of milk purchased in a milk bar, and was due to the very high degree of refrigeration causing the plunger arrangement on the delivery system to become entirely ineffective. The seller was advised as to the best method to avoid these deficiencies in future. The other fat deficiencies were due in some instances to the cows giving milk below standard, and in other cases to uneven intervals between milkings. Sufficient advice and publicity have been given to the effect of unreasonable intervals between milkings, but it appears that some producers are still more concerned with their own convenience than the qualitative standard of the milk produced at their farms.

Another 64 non-genuine milk samples were certified to be below the standard for solids-not-fat, but containing no added water. The results in respect of this large number of non-genuine samples emphasise once again the usefulness of the Hortvet Freezing Point Test in establishing both the presence and the absence of extraneous water in milk.

In one of my previous reports I brought to your notice the regrettable practice, which unfortunately is now more prevalent, of passing off ordinary and pasteurised milk as T.T. Milk. Successful legal proceedings were instituted by the Department against a retailer for the sale of pasteurised milk as raw T.T.Milk.

For certain analytical reasons, it is particularly difficult to detect the offence I have just mentioned. Our Public Analyst has, however, in this connection, suggested that if the adulteration of T.T.Milk with pasteurised milk increases and cannot be met in any other way, consideration should be given to the addition of some element or compound (which can be easily identified on analysis) to pasteurised milk to render such milk recognisable in mixtures.

From the Table appended to this report it will be noted that successful proceedings were instituted in respect of a bottle of milk containing Fly Larvae, and in another case in respect of a milk bottle containing 40 parts of sediment per 100,000 parts of milk. Both samples were brought to the notice of the Department by the consumer, a fact which suggests that, happily, the public are becoming more hygienically minded in connection with items of their daily diet.

Successful proceedings were instituted in respect of three samples of Ice Cream seriously deficient in fat. It has just been made known that milk can again be used in the manufacture of ice cream, and this concession will, I hope, make it possible to re-introduce the original standard for ice cream.

The results for foods other than milk submitted for analysis during the year are quite satisfactory, four only being certified as non-genuine. The four samples of Drugs reported as non-genuine were dealt with by means of cautions and letters of advice.

The Department's Officers have worked hard and long in administering this Act, but we are pleased in the knowledge that we afford a measure of public protection, and that our efforts possibly contribute to some extent to the sum total of public health.

E. T. Edwards,

*Chief Sampling Officer.*"

TABLE A

**Particulars of Samples of Milk, Food and Drugs obtained under the Food and Drugs Act, 1938, during the year ended 31st March, 1953.**

| | Total number of Samples taken | Genuine | Non-Genuine | No. of Samples submitted to Public Analyst | No. of Samples tested by Department |
|---|---|---|---|---|---|
| Milk ... | 682 | 570 | 112 | 205 | 477 |
| Food ... | 123 | 119 | 4 | 123 | — |
| Drugs ... | 17 | 13 | 4 | 17 | — |
| Total | 822 | 702 | 120 | 345 | 477 |

TABLE B

**Showing the Number of Non-Genuine Samples Taken and Submitted for Analysis during the year ended 31st March, 1953.**

| No. of Samples | Article | Result of Analysis | Remarks |
|---|---|---|---|
| 16 | Milk ... ... | 7, 6, 8, 8, 4, 6, 9, 8, 8, 4, 7, 4, 1, 4, 6 and 8 per cent of added water respectively. | Legal proceedings instituted and producers convicted. |
| 1 | Milk ... ... | 4% of added water ... | On delivery samples found genuine. |
| 1 | Milk ... ... | 5% of added water ... | Officially cautioned. |
| 2 | Milk ... ... | 7 and 7% of added water | Case under consideration. |
| 1 | Milk ... ... | 2% of added water ... | Informal sample. |
| 2 | Milk ... ... | Deficient in fat to the extent of 42 and 23% respectively | Legal proceedings instituted and producers convicted. |
| 1 | Milk ... ... | 17% deficient in fat ... | Case dismissed on payment of costs. |
| 1 | Milk ... ... | 52% deficient in fat ... | Advice given to seller. Further samples proved genuine. |
| 6 | Milk ... ... | 33, 28, 20, 18, 3 and 17 per cent deficient in fat | Cows giving milk below standard. Officially cautioned. |
| 2 | Milk ... ... | 17 and 15% deficient in fat | Uneven intervals between milkings. |
| 7 | Milk ... ... | 13, 17, 15, 7, 5, 5, and 7% deficient in fat | Further samples proved genuine. |

TABLE B (*continued*)

| No. of Samples | Article | Result of Analysis | Remarks |
|---|---|---|---|
| 2 | Milk ... ... | Below for solids-not-fat. No added water | Further samples proved genuine. |
| 64 | Milk ... ... | Below for solids-not-fat. No added water | |
| 1 | T.T. Milk Informal | Contained pasteurised milk | Followed up with formal samples. |
| 3 | T.T. Milk ... | Contained pasteurised milk | Convicted. |
| 1 | Milk ... ... | Contained fly larvae ... | Convicted. |
| 1 | Milk ... ... | Contained 40 parts of sediment per 100,000 parts of milk | Convicted. |
| 2 | Ice Cream ... | 24 and 35% deficient in fat | Legal proceedings instituted and sellers convicted. |
| 1 | Ice Cream ... | 32% deficient in fat ... | Sample decomposed. Analysis void. |
| 1 | Ice Cream ... | 30% deficient in milk solids | Officially cautioned. |
| 1 | Vita Glucose Tablets (Informal) | Contained foreign bodies | Subsequent formal sample found gennine. |
| 1 | Ammoniated Quinine Tablets (Informal) | Deficient in Ammonium Bicarbonate content | |
| 1 | Ammoniated Quinine Tablets (Formal) | Deficient in Ammonium Bicarbonate content | Manufacturers advised by Clerk of the County Council. |
| 1 | Liquorice Powder | 9.6% deficient in Alcohol extractive | Subsequent formal samples proved genuiue. |

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